JUNE 1959

THE MANAGEMENT REVIEW

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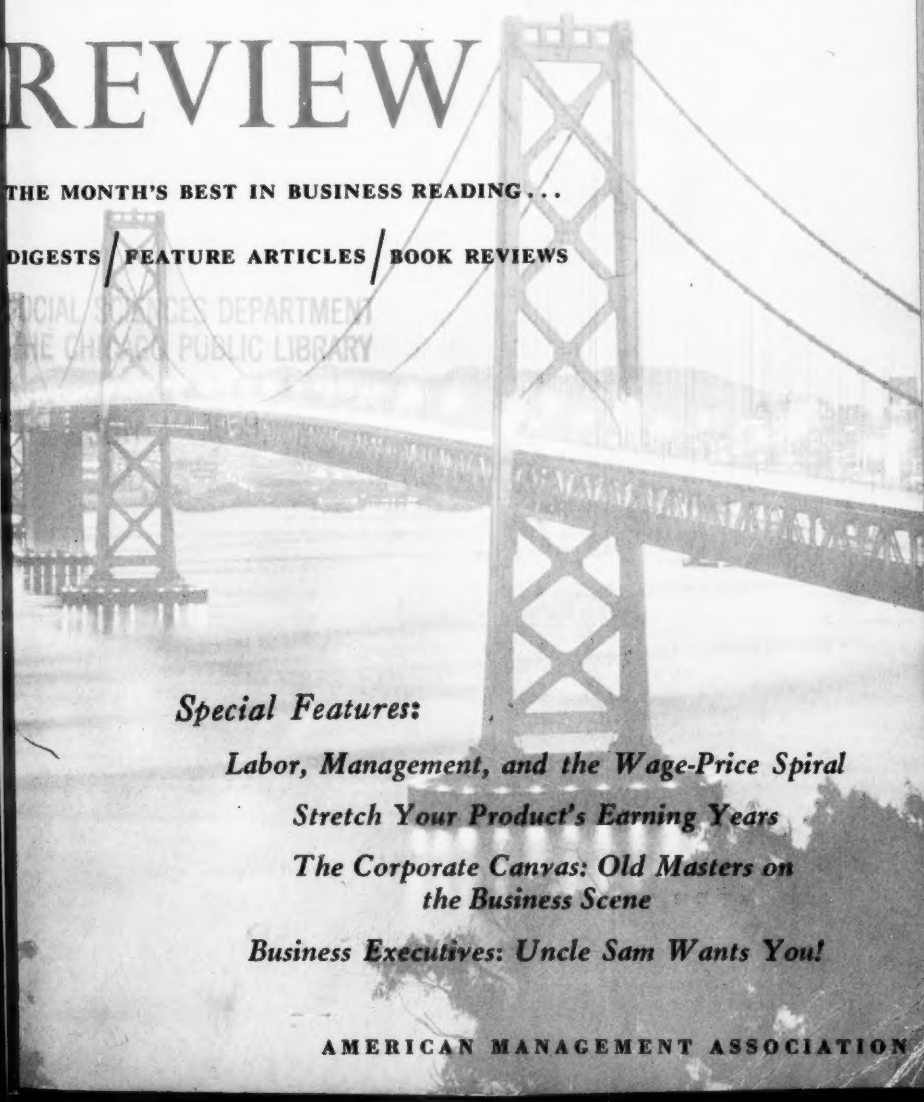

Special Features:

AMERICAN MANAGEMENT ASSOCIATION

in this issue . . .

- **Is Everybody Happy?** Squeezed between labor leaders demanding increased benefits and stockholders seeking higher dividends, top management's answer too often has been to accede to union demands, and then raise prices to maintain profit margins, declares JOHN W. JORDAN. But this line of action has *not* kept everybody happy—least of all the consuming public—and the wage-price leapfrog will continue until management (the only party, in Mr. Jordan's opinion, that can do anything about it) changes its modus operandi. In this month's opening article, he examines the issues and offers some well-reasoned recommendations for coming to grips with them.

- **Profits and the Product Life Cycle.** Products, like people, have a distinct life cycle, and an "old" product calls for entirely different promotion and marketing methods than one in its salad days. Citing a wide variety of case examples, ARCH PATTON's article on page 9 shows how products, moving from one stage of the cycle to another, call for a different handling, necessitate different types of management decisions—and, in some cases, require different types of managers to make them.

- **Uncle Sam Wants You.** When Mr. Smith goes to Washington to accept an executive post, bringing with him years of experience in private industry, his decision is generally regarded as something of a bonanza for the government—and a real personal sacrifice on his part. Commenting on this sad state of affairs, ROCCO SICILIANO, Special Assistant to the President for Personnel Management, discusses the incentives that exist—and others that must be offered—to assure the government the top-caliber leadership it so urgently needs today.

- **I Paint What I See.** If Rembrandt took a leisurely stroll through your offices, what masterpieces might the sights there inspire? Some possibilities are suggested by this month's cartoon feature, *The Corporate Canvas: Old Masters on the Business Scene.*

—THE EDITORS

JUNE 1959
Volume XLVIII, No. 6

THE MANAGEMENT REVIEW

FEATURES

BUSINESS DIGESTS OF THE MONTH

Trends and perspectives

Cover photograph: H. Armstrong Roberts

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LABOR, MANAGEMENT, and the WAGE-PRICE SPIRAL

■ *John W. Jordan*

ONE OF THE INCONTROVERTIBLE FACTS that emerged from the recent recession is that labor unions not only have power to maintain prevailing wage rates when the economy dips, but they can actually increase those rates substantially. Since evidence is accumulating that basic industries intend to continue the practice established over the past decade of raising prices to cover their wage increases, the much-heralded improvement in business promises nothing so much as a resumption of the wage-price spiral. For millions of Americans living on fixed incomes, an economic "recovery" with this built-in feature can well become a bitter joke.

It is, of course, clear that the unions are not even pausing for breath in their drives to gain greater benefits for their members. In the past, general economic conditions and the position taken by individual managements have been the two chief factors limiting the success of the unions' efforts; the lesson of the recession is that the economic element is losing its significance. To some extent,

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Mr. Jordan, who is counsel for a large New England pulp and paper company, is a member of the New York and New Hampshire bars.

indeed, the second factor, management's position, has contributed to diminishing the importance of the first—as, for example, through adoption of long-term labor agreements providing for future "productivity" increases regardless of the economic conditions existing at the time they become effective.

It is apparent, therefore, that the position taken by managements in dealing with labor leaders will be the critical factor bearing upon the continuing wage inflation, and it is time to take a new look at the status, responsibilities, and attitudes of the corporate manager—the man who holds primary executive authority in his corporation, whether his title is chairman, president, or executive vice president. This is the man who must bear the tremendous responsibility of acting to halt the wage-price spiral, for the simple reason that, in the present state of affairs, he is really the only one who *can* do anything about it.

LABOR-MANAGEMENT "REALITIES"

The corporate manager today is far more deserving of the sympathy of thoughtful people than is the labor leader. Worthwhile as the disclosures of the McClellan Committee in the Senate are proving to be, the danger is that the activities of the Committee are diverting attention from the issue of union power to that of union corruption. There are, after all, ample laws to deal with dishonesty in unions, as well as in other organizations. On the other hand, as Donald Richberg has pointed out in his *Labor Union Monopoly:* "Americans are more out-of-date and ill-informed concerning the realities of the labor movement in the United States than they are in any other area of public interest. Fifty years ago, the picture of a labor union as a weak, idealistic organization of downtrodden workers struggling against an oppressive concentration of property power was often accurate. Any such picture of an established union today is not merely ridiculous; it is willfully and ignorantly untruthful."

The corporate managers of America's major industries have been dealing with these "realities" now for at least a decade. In a climate compounded of general prosperity and of favorable public and governmental attitudes toward organized labor, it is not surprising that the corporate manager has up to now utilized a technique of

avoidance in meeting the challenge of union power. Squeezed between labor leaders demanding exorbitant benefits on the one hand and stockholders seeking higher dividends on the other, the corporate manager has adopted a modus operandi that spares him the pain of battling either faction: The union's excessive demands are met, prices are raised to cover the higher wage costs, profit margins are maintained or even augmented, and everybody is kept happy. Everybody, that is, except that vague, unorganized, and inarticulate group, the consuming public.

The prospect of this wage and price leapfrog continuing for another decade should dismay even the stoutest defenders of creeping inflation. Is there nothing that the corporate manager can do about it? To examine this question, we must consider the position and power of the corporate manager, the special problems that confront him in the field of labor relations, and, finally, the reorientation of his viewpoint in relation to organized labor.

STATUS OF THE CORPORATE MANAGER

The elemental importance in the American economy of our great corporate enterprises is almost self-evident. Multiplant industries engaged in the production of such basic essentials as steel, chemicals, electrical equipment, automobiles, aircraft, and the like play an indispensable part in maintaining the material welfare of the American public and safeguarding the very security of the nation. Corporations provide a living—if not, indeed, a way of life—for millions of our citizens. Peter F. Drucker, in his *Concept of the Corporation,* notes: "What we look for in analyzing American society today is therefore the institution which sets the standard for the way of life and the mode of living of our citizens; which leads, molds, and directs; which determines our perspective on our own society; around which crystallize our social problems and to which we look for their solution . . . And this, in our society today, is the large corporation."

It is a logical corollary that the power held by the managements of these major industries assumes awesome proportions, ranking scarcely lower than that of our leading statesmen. For the exercise of that power, the modern corporation, like all organizations fashioned by man, looks ultimately to an individual. Notwithstanding

the advocates of the democratic-participative school of management, the American corporation remains essentially hierarchical in structure and operation, and one man—whom we have termed the "corporate manager"—makes the final decisions.

It follows that the beliefs and actions of a relatively small group of corporate managers can have far-reaching effects upon the welfare of the nation. Nowhere is this more true than in the field of labor relations, where the union practice of "pattern" bargaining, applied countrywide, gives particular emphasis to the actions of the basic industries in the matter of wage increases.

The corporate managers of the country's leading industries simply cannot disclaim responsibility for the consequences that flow from decisions made by them in the field of wages and prices. If, as most economists contend, the wage-price spiral is an important contributing factor in the continuing inflation, corporate managers cannot escape criticism by blaming government deficits or pointing to organized labor as the sole culprit. That they have been faced with difficult choices, no one can deny; whether their decisions in the past have been altogether wise is another matter.

THE MANAGER'S DILEMMA

Frequently, when one of the major industries announces price increases consequent upon a wage negotiation, legislators in Washington spring into print with threats of a Congressional investigation into the alleged blow to living costs. Before we join our political friends in pointing an accusing finger at the industries, it is only fair to consider some of the special problems with which the corporate manager must deal when it comes to wages and prices.

In terms of groups to be considered where wages are involved, the interest of the labor leader is singular; that of the corporate manager is plural. Union leaders can pursue their objective of higher wages with a single-mindedness of purpose that is denied to the corporate manager when he approaches the problem from the other side of the table. Presented with strong wage demands, the manager must consider not only the rights of the employees, but also the interests of the stockholders, and, particularly where price increases may be involved, the effects upon customers. This is not to mention the interests of still another group, the largest of

all—the general public. Is it not, the corporate manager might ask, also the responsibility of union leaders to consider the public interest? Indeed it is, but there are few signs that this responsibility is being recognized. We must deal with present realities, not future hopes.

Compelled by circumstances to mediate among groups whose interests are conflicting, the corporate manager cannot hope to make a decision that will satisfy all. If he elects to absorb the wage increases by holding firm on prices, the subsequent effect upon profit margins visits upon him the displeasure of his directors and stockholders. If he chooses to raise prices to cover the wage increases, he is subjected to criticism by customers, politicians, and consumers. If he decides to accept a strike rather than to yield to exorbitant demands, he incurs the wrath of practically everybody—union leaders, employees, stockholders, customers, politicians, and community groups.

PRESSURES AND PRINCIPLES

It is particularly in the latter contingency, the acceptance of a strike, that the pressures on the corporate manager can become well nigh unbearable. Just as the willingness to strike constitutes the union's ultimate strength in collective bargaining, so the willingness to accept a strike is the corporation's ultimate weapon. That corporate managers make infrequent use of this economic power is understandable in view of the pressures that various groups bring to bear upon them.

By and large, stockholders take a dim view of strikes, especially those resisted on grounds of principle. Being human, stockholders can be just as selfish and shortsighted about getting their share of the corporate pie as the labor leaders. A strike will shut down operations and therefore reduce profits. That's enough. Let the management grant the increases, raise its prices like everybody else, and get along with running the business. Corporate managers should forget principles, stockholders reason, and think about how the first quarter results for this year will compare with last year's first quarter results, not concerning themselves with how a precedent set now will adversely affect the business two, three, or five

(*Continued on page* 62)

Stretch Your Product's Earning Years

Top Management's Stake in the Product Life Cycle

■ ***Arch Patton***
McKinsey & Company, Inc.

IT IS RELATIVELY EASY for top management to recognize the profit implications of price reductions, design changes, product obsolescence, and other of the more obvious competitive weapons where a particular product is concerned. But executives have been slower to grasp the importance of a product's position in its life cycle as a basis for planning the strategy of profitable product exploitation. Too often their attention is focused on day-to-day competitive situations, or company-wide problems, rather than on the opportunities to advantageously shape a product's destiny that result from trends inherent in its life cycle.

The life cycle of a product has many points of similarity with the human life cycle; the product is born, grows lustily, attains a dynamic maturity, then enters its declining years. Like the human, a product that has not built up its potential during the formative years is likely to be relatively unsuccessful in its maturity. And just

as each of us must manage our financial resources during maturity to take advantage of opportunities or protect ourselves against adversity, so executives who control the destiny of a product must optimize their use of capital resources in the latter stages of the product life cycle.

There are critical differences between the product and the human life cycle. Every person has an average life expectancy—his allotted "three score years and ten." But the life expectancy of a product varies widely. When a dress designer creates the "sack" style, he probably expects that it will have little more than a year of life; the design of a Chippendale chair may be "good" for generations. Aspirin is still aspirin after 65 years, but jet-prop engines were virtually obsolete by the time they came off the drawing board.

Although man has fruitlessly sought the elixir that will extend his own span on this planet, product life cycles—or phases of the cycle—have been lengthened or shortened by a variety of causes. When patents on the tubeless tire did not stand up in court, the product moved through the introductory and growth stages to maturity in less than four years. The automobile industry lengthened its maturity period immeasurably by what has come to be called "planned style obsolescence," which made automobiles a symbol of success rather than a means of transportation. (The auto industry's short-cycle model change based largely on styling has been tried in other industries with relatively less success. Perhaps if TV sets, refrigerators, and washing machines were parked in our driveways, the result might have been different.)

THE LIFE CYCLE CONCEPT

Essentially, the product life cycle concept is a simple one. It has three key elements: (1) Products move through the cycle of introduction, growth, maturity, and decline at varying speeds; (2) unit profits climb sharply in the growth phase and start to decline because of competitive pressures during the maturity phase, while volume continues to rise; and (3) the functional emphasis required for successful product exploitation—engineering and research, manufacturing, marketing, and financial control—changes from phase to phase in the cycle as shifts occur in the economics of profitability.

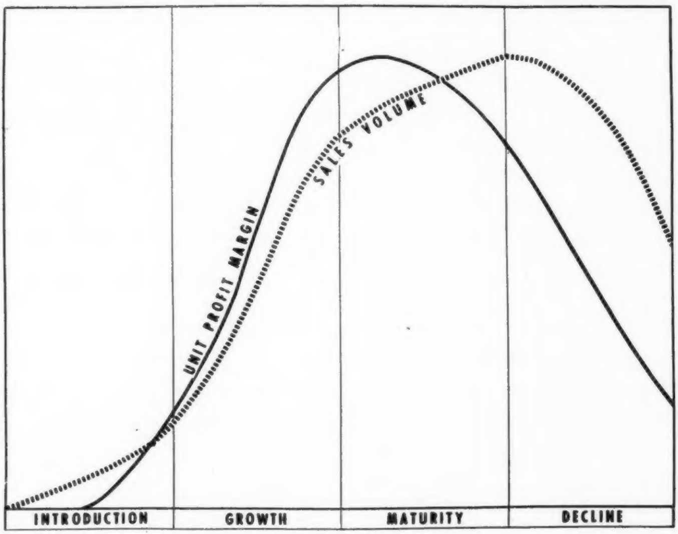
At the risk of oversimplifying the life cycle concept, the chart on this page gives a view of the profit and volume relationships occurring in each phase of the cycle. The losses of the early introductory phase give way to soaring unit profit margins during the growth phase. Profits turn down—while volume continues to expand—in maturity, and both slump during the decline, or obsolescence, phase.

These profit-volume shifts, in turn, lead to changes in the relative importance of the various functions within a company from phase to phase. This is probably best described by a brief review of the distinguishing environmental characteristics in each segment of the product life cycle.

The Introductory Phase

The critical ingredient here is research or engineering skill in product development. However, skill in testing and launching the product ranks high as a factor in its ultimate success. Many a "better mousetrap" never saw the light of day because consumers

PROFIT-VOLUME RELATIONSHIPS IN THE PRODUCT LIFE CYCLE



did not know which door to beat a path to. Normally, losses are heavy in this period, for volume is too small to yield a profit in the face of high promotional costs.

The Growth Phase

The product having survived the introductory phase, the problem becomes one of getting a workable version on the market in sufficient volume to secure a brand franchise. This is of special importance for a consumer product, which must build acceptance at the distribution, retail, and consumer levels.

Thus manufacturing becomes the key function. Many products have died in the growth phase because engineering or research tinkered with product design so long that competitors pre-empted the market by the time production got under way. Indeed, there is evidence that, under certain market conditions, volume is more important than product quality at this stage. The consumer apparently will accept uneven quality in a product's early growth period if he wants the product and has little basis for comparison between products. However, it must be added that the extent to which a product provides real consumer satisfaction at this stage largely establishes the quality climate in which the product will live in later stages of its life cycle.

This is a period of high and sharply rising profits for manufacturer, distributor, and retailer. Risks can be accepted that would be disastrous in a more competitive era, for soaring demand covers a multitude of sins involving hasty or ill-considered actions.

At some point in the growth phase, marketing decisions of great future importance are made. For example, agreeing to market the product through a specific distribution channel, or to sell only to the "quality" market, may become important restrictions on product maneuverability in the next, or maturity, phase.

The Maturity Phase

As volume rises and the market becomes increasingly saturated, marketing steps to the center of the stage. Generally speaking, at this point all competitive products are reliable and there is less and less to choose between them. Improvements in the product tend to be small, with "selling features" or style changes dominant.

Profit margins begin to slip during this phase, despite rising volume. This results from each agency in the distribution process—starting with the retailer, moving back to the distributor, and finally reaching the manufacturer—giving up some profit in an effort to maintain or increase volume. This may take the form of one link in the chain absorbing costs that normally are borne by another (distributors handling credit and financing for retailers, manufacturers consigning stock to distributors), or taking over the functions of the other (as when manufacturers set up branches to replace distributors or retail outlets to bypass both distributors and retailers).

Often overlooked in assessing product distribution costs at this juncture are the costs *beyond* the manufacturer's sales force—the profit margins of distributors and retailers. These costs loom large in the total product cost, lie closest to the consumer, and are the first to feel a price squeeze. If the experience of recent years is any criterion, price pressure on a "mature" product at the manufacturer level lags behind retail and distributor price pressures. This tendency underlies the movement among manufacturers to "get closer to the consumer" by establishing branches or retail outlets. Such a step is designed to protect the factory profit by accepting a break-even, or loss, if necessary, at the branch or retail level to move the product in quantity.

Creative selling may develop whole new markets for the product in the maturity phase, despite apparent saturation of the market. Cigarette manufacturers opened the female market when the sales to male smokers approached saturation; and deodorant makers reversed this procedure by turning to the male market after saturating the female market.

The Decline Phase

As a product becomes increasingly mature, the pressure to reduce costs in each step of the engineering-manufacturing-distribution process mounts. This results from growing price competition, as the difference between competitive products is reduced to the vanishing point and increasingly sophisticated consumers evaluate price and quality more effectively in their buying. The advantages of the "old" product versus the attractiveness of the "new" products

coming on the market also play a part in the consumer's assessment of product value at this point.

The need for controlling costs, which normally starts while volume is still rising, becomes a matter of survival as the product moves into the decline phase. The few manufacturers of street cars, steam locomotives, and windmills still in business are the last of a long list of competitors; they survived by withstanding price pressures of the decline phase longer than the others, or by developing other products.

The dominant role of marketing at product maturity gives way in the final phase of the product life cycle to the need for a coordinated control over all product costs: engineering, manufacturing, and marketing. The functional emphasis in a product's decline—and in the late maturity phase—thus becomes one of "managing" product expenditures to optimize the return on each dollar of cost.

The product can no longer afford a marketing, or manufacturing, or engineering-oriented management. It cannot afford, for instance, to have the engineering department spend 90 per cent of its development budget on marginal improvements with little consumer attraction; or to have a manufacturing department "under run" a seasonal product 30 per cent to protect itself against being overstocked at the year end; or to have a sales department overestimate product requirements by 20 per cent to ensure prompt delivery.

Each of the above decisions (they actually occurred) appeared reasonable to the functionally oriented executives who made them, and, had the products involved been in the growth phase, the chances are good that these errors in judgment would have been buried under the rising tide of demand. However, each of the products faced the severe price pressures of late maturity, and company profits were sharply reduced by these unilateral decisions.

As the necessity for "managing" the exploitation of a product grows more acute, financial controls become increasingly important. So do the skill, resourcefulness, and courage of the financial executive. He becomes, in effect, the chief of staff to the executive with over-all profit responsibility, who alone has the authority to insist that functional executives develop a coordinated program to optimize product profitability.

(*Continued on page* 67)

THE CORPORATE CANVAS

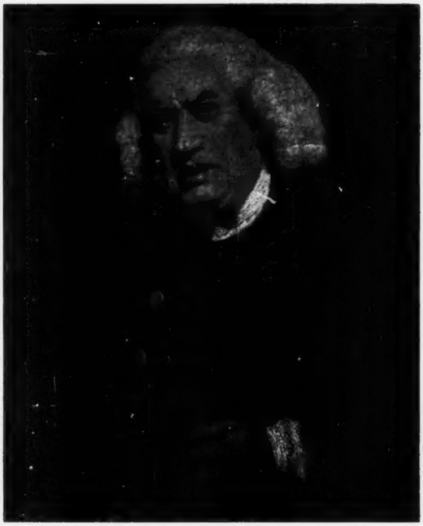
OLD MASTERS ON THE BUSINESS SCENE

"I may not be the world's best secretary, but I'm the only girl in the office who understands the filing system."

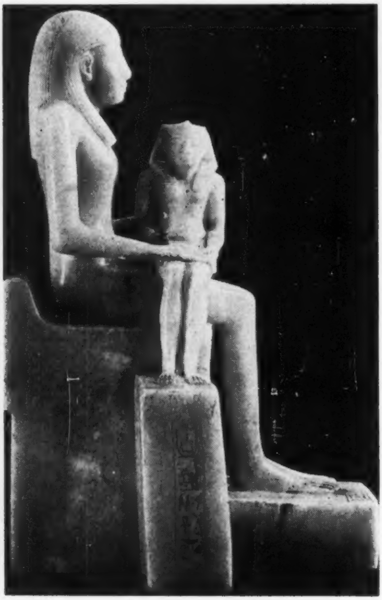
"What makes you think you're *worth* $10 more a week?"

"Parker here says we can't afford a higher ad budget."

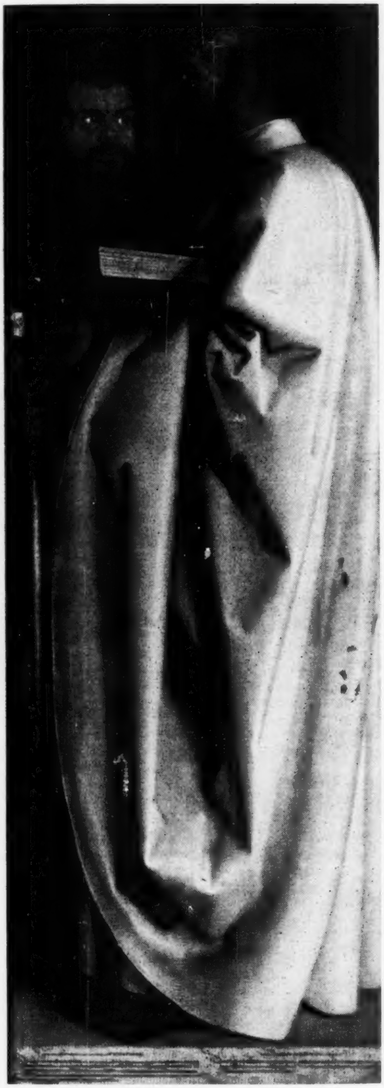
"But those cards all had little holes in them, so I threw them away."



"Spanish rice? In the executive lunch room?"

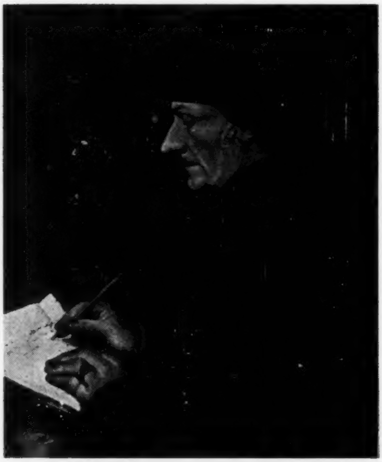


"Then, after you graduate from Princeton, Daddy will make you his plant manager."



"But Leo, the bank examiners will be here this afternoon."

"Let him wait. Can't a girl even go to the washroom in this crummy company?"



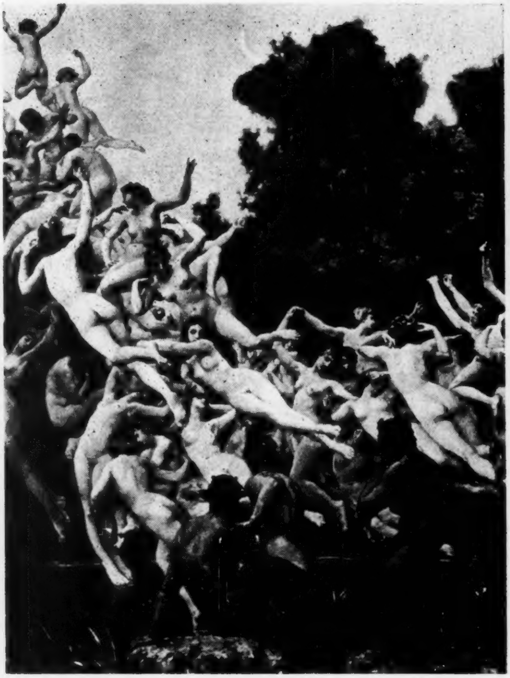
"It gives me equally great pleasure to announce . . ."

"They're featuring filet of sole in the cafeteria again."

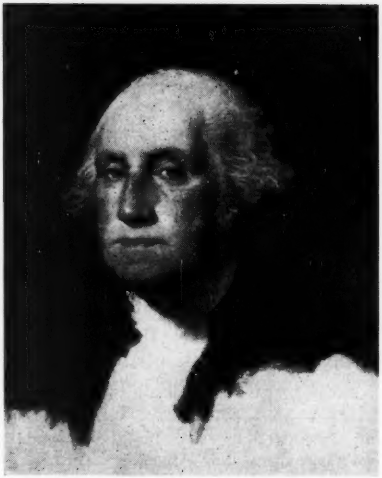
"I'm sorry, Mr. Peters, but what did you say after 'Dear Sir'?"

"Come with me to the convention, he said. Only a few short meetings, he said."

"Happy Bir-r-rthday, Dear Mr. Carpenter, Happy Birthday to you!"



"There's a mouse in the ladies' room!"



"But I don't understand, Mr. Cranshaw—no one has ever questioned my honesty before."

BUSINESS EXECUTIVES:

UNCLE SAM WANTS YOU!

■ *Rocco C. Siciliano*

Special Assistant to the President for Personnel Management

ONE OF THE FINEST and greatest civilizations the world has known was that of Greece, which flourished more than two thousand years ago. "We are a free democracy," wrote Pericles. "We do not allow absorption in our own affairs to interfere with participation in the nation's. We yield to none in independence of spirit and complete self-reliance, but we regard him who holds aloof from public affairs as useless."

For centuries, this small state was able to fight off its powerful enemies and, at the same time, develop a culture which the world respects even today. And why did the Greeks finally fall? Not because their external enemies were so strong—but because their spiritual strength gave way. When they sought freedom from responsibility, when they stopped giving to the state and looked to the state to give to them, they ceased to be free.

From an address by Mr. Siciliano before the Personnel and Industrial Relations Association, Los Angeles, California.

Today, the survival of the democratic idea developed by the Greeks depends on the government of the United States. Today we, too, are threatened by a powerful antagonist—and it is not only a military threat, but an ideological one as well. Russia is determined to demonstrate that its form of government—which holds that the state is all-important and the individual of no significance—can best the free world militarily, scientifically, and economically.

GROWING GOVERNMENT COMPLEXITY

Are we prepared to meet this challenge? Our success, in no small measure, will depend on the capacity of the federal government to provide leadership—not only to the American people, but to all the democratic peoples of the free world.

Since the earliest days of our Republic, we have been fortunate in being able to attract to the public service capable men who rose to the occasion, whatever crises confronted us. But the federal government today is a far more complex organization than was government in the past. George Washington was literally able to hand-pick the 350 individuals who comprised his first administration. The federal government today employs 2.3 million people in every kind of work, every type of skill, every level of technical specialization, and every profession.

The federal government is, in effect, a corporation with 176 million stockholders. Its receipts and expenditures total $77 billion a year. It owns 472 million acres of land and 2.5 billion square feet of building space. Its real estate holdings are valued at $45 billion (a gross underevaluation, by the way—the Presidio of San Francisco is carried on the books at $99,000). It has ten major subsidiaries (departments) and some 65 minor ones (agencies). It has installations in every community, state, and territory, and representatives in every recognized nation in the world.

To staff an organization of this size and complexity with a sufficient supply of capable executives is a far different proposition from that which confronted administrations during the first 150 years of the Republic. The federal government today needs three types of executives to carry out its responsibilities: first, the "political" executives, those who serve at the pleasure of the President and his immediate department and agency heads; then the "career"

executives, those in the top grades (GS-16, 17, and 18) of the Civil Service system; and third, engineers and scientists.

The problem of obtaining, developing, and retaining qualified executives is not peculiar to the federal government. Indeed, for nearly two decades an acute shortage of qualified manpower has plagued most of the economy. But in recent years the federal government has experienced increasing difficulty in obtaining and holding a proportionate share of the available manpower.

POLITICAL EXECUTIVES

The number of top political executive positions in the federal government is approximately 1,000, about half of which are at the Cabinet and sub-Cabinet levels: heads, deputy heads, and assistant heads of executive departments and agencies, including members of boards and commissions. Despite the fact that the Eisenhower Administration has been widely thought of as a businessmen's government, it has experienced the same difficulties as have prior Administrations in attracting and holding capable administrators for these top-level positions. A recent survey by the Harvard Business School Club of Washington, D.C., shows that 70 per cent of the businessmen who held federal government positions between 1953 and 1956 served one year or less. When the longer period, 1941-1956, including World War II and the Korean conflict, was considered, those serving less than one year amounted to 44 per cent. In view of the fact that it takes from six months to a year for anyone entering a new position to become reasonably familiar with the job, these short tours offered little opportunity to exercise the type of leadership that the nation requires.

The same survey indicated that "there exists a frightening lack of interest in the business community for participation in the government service. For example, of businessmen who had not served in the government, 50 per cent stated that they did not know the attitude of their companies toward government service."

Barriers to Government Service

Why should the federal government experience so much difficulty in filling its political executive positions and keeping them filled on a satisfactory basis? The second Hoover Commission in-

vestigated this problem and identified four causes of difficulty:

1. The scarcity of persons possessing the requisite combination of abilities.
2. The absence of any place in American life where capacities required of political executives are systematically developed.
3. The disadvantages that those who shuttle back and forth between public office and private life often suffer in their private careers.
4. The psychological and financial barriers that must be surmounted by those who leave private life for the insecurity and limited salaries of public appointive office.

The Harvard Business School survey came up with similar conclusions and suggested some solutions. The Harvard group felt that educational institutions, particularly colleges and universities, should place far more emphasis on instruction in the processes of modern government. Courses, regardless of major academic field, should be concerned not only with political and economic theory, but should be strongly oriented toward *actual problems* of public administration and the responsibility of American citizens to serve in their government.

It also urged that businessmen take an active part in national politics and keep themselves informed regarding national and international issues. Businesses should formulate policy relating to government service on the part of their executives—policies designed to encourage government service as experience beneficial both for the individual and the firm.

Of particular pertinence was the recommendation that government agencies inform the party in power of the types of individuals required to fill specific administrative positions and that candidates be placed primarily on the basis of ability as well as because of political or personal recommendation.

Also suggested was the establishment, by a professional institution, of short off-the-job training programs for new administration executives.

Finally, "conflict of interest" laws should be interpreted and applied under rules of reason, so that potential executives would

not have to make substantial financial sacrifices in order to serve.

These and other aspects of the problem of staffing the top echelons of the federal government demand the attention of all thinking citizens. Unless we can develop an adequate supply of really competent executives who are willing to devote some part of their working lives to serving their government, our chances of winning out in the competition with Soviet Russia are materially lessened.

CAREER EXECUTIVES

A second vitally important group of federal officials are the nonpartisan career executives who provide continuity in the administration of the government's activities. These individuals—about 750 in number—occupy the top three grades of the Classification Act pay schedule (GS 16-18), with salaries ranging from $14,190 to $17,500. Most of the incumbents have spent the greater part of their working lives in the federal government, entering at some relatively low status and progressively moving upward through the grades, although some entered the service at relatively high positions. Many of them entered the service during the depression years, when the federal government was in an advantageous position to attract an unusually high quality of younger people.

This group represents our highest form of "capital investment." We must insure that this fund of talent does not shrink as the natural forces of attrition occur. It is upon this group that the political executives of each administration depend for indoctrination in the workings of government, for sound advice on how to get things done, and for administering the operations of their respective departments and agencies.

The government has been able to develop and hold a sufficient number of career people to meet current requirements; the concern is about the future. A recent survey of the career executive group indicates that approximately 25 per cent are now eligible for retirement; a third could retire in the next five years; and by 1968, two-thirds will be eligible to retire. This does not take into consideration those who die or leave voluntarily. Will qualified replacements be available?

(*Continued on page* 80)

Experts foresee an astonishing population growth for the United States in the coming decades. Will it bring prosperity —or new strains on the economy?

THE YEARS AHEAD:

More People, More Problems

By James A. Reynolds

Condensed from The Wall Street Journal

DESPITE a recession-linked lull in the baby boom, the nation is heading into an era of rampant population growth—a growth that promises both prosperity and problems.

If the current growth curve continues, asserts the Census Bureau, the U.S. will contain 260 million people by 1980. That would be a leap of 84 million from today's tally and more than double the increase in any similar past period; the increase between 1940 and 1960, for instance, will be only around 38 million. By the year 2000, the current rapid rate of growth would produce a population roughly double the present 176 million.

While no one can be sure that such a population actually will materialize, the makings of an astonishing growth are on hand. The annual birth rate is running far ahead of the death rate—15 per thousand ahead, at latest report. This rate of gain is being applied to an ever-larger numerical base. Furthermore, the birth rate could climb if the trend toward younger marriages and earlier childbearing continues. And the death rate could drop if scientists score new breakthroughs in the fight against heart disease, cancer, and other killers.

Population experts foresee a new deluge of births starting in the late 1960's as the postwar baby crop reaches the age of parenthood. This wave may lead to another, bigger expansion as the century closes, when the second postwar generation in turn begins marrying and having

children. This increase in the number of Americans requiring food, clothing, and shelter, not to mention cars and television sets, holds the prospect of an expanding economy. But it also may bring new strains—on roads, schools, and water supplies, for example.

"If we can sustain healthy economic growth, the rapid increase in our numbers can be an asset, at least in the short term," says Robert C. Cook, director of the Population Reference Bureau, a nonprofit organization that gathers and interprets population data. "More people mean more markets for business, growing demand for more goods—all the things that help make an economy function smoothly.

"On the other hand," he warns, "if our economy slumped we would still have to clothe, feed, and educate many millions of youngsters just starting out in life. This burden probably would step up, rather than diminish, the role which the federal government plays in our daily lives."

While some population experts believe Mr. Cook takes too gloomy a view, most agree that new millions will bring problems: Industry will dig deeper into reserves of the fuels and minerals considered essential today; water shortages may spread; traffic may strain highways designed for a less populous era. Costly new welfare programs will be needed to provide for a mounting number of people over 65. Farmers who now grow surpluses with ease may even have to exert themselves to raise enough food to supply a bigger and hungrier population.

Housing needs will start to rise after 1966, predicts the National Association of Home Builders. By 1980, it estimates, some 2 million new homes a year will be needed just to keep pace with population growth; slum clearance and replacement of old dwellings will push the need even higher. In contrast, homebuilding currently is jogging along at a 1.3 million annual rate.

Population pressures are expected to place unusual strains on the U.S. labor force. Between now and 1965, government analysts figure, the nation will need 6 million more workers to produce the goods and services demanded by the expanding population. Employers can tap a rising reserve of women, people over 45, and young people under 24. But because of the low birth rate of the 1930's, the government experts say, management now is facing a relative scarcity of young men in the prime working age bracket of 25 to 34. In the decade after 1965, the shortage will shift to the vital 35-to-44 age bracket.

"The first real bulge in the total labor force," says Seymour L. Wolfbein, a Labor Department manpower specialist, "will come in 1965, when the 1947 postwar baby crop turns 18. During the following decade, the labor force will show its greatest growth.

"This means," he continues, "that somehow we'll have to expand the number of jobs to take care of the increase. Fortunately, a bigger population usually leads to a rising demand for goods and services—and more jobs."

Urban areas will bear the brunt of the coming population pressure.

In 1950, 55 per cent of a U.S. population of 150 million lived in what the Census Bureau calls a "standard metropolitan area"—a county or group of counties containing a central city of 50,000 or more. By 1980, according to federal forecasters, more than two-thirds of a projected population of 260 million will live in such metropolitan areas, as farm mechanization continues to cut the force needed to raise farm crops. Even more than now, urban growing pains may take the form of clogged highways, crowded schools, sprawling suburbs, and rising taxes.

Water shortages, to name just one civic problem of the future, may grow more acute. The Population Reference Bureau says the generally hot, dry states of California, Arizona, New Mexico, Nevada, and Utah may someday be forced to restrict the inflow of new industry and residents to conserve water. Even cities in the Ohio River valley may find water increasingly precious. Some towns may ultimately be forced to follow the 1956 example of Dallas, where "water bars" did a brisk drought business selling distilled water at 50 cents a gallon, almost double the price of gasoline.

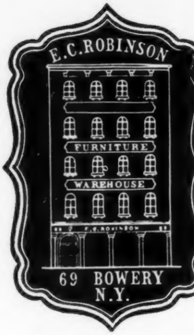
Thirsty industries gulp most of the water consumed in the U.S. Almost 69,000 gallons of water are needed, for instance, to make the steel used in a single new car. Daily use of water rose from 530 gallons a person at the turn of the century to 1,340 gallons in 1950. By 1970, the average probably will be 1,950 gallons. Best hope for the future: some method of extracting fresh water from the ocean, a project now under intensive study by the federal government.

Educators already are struggling to keep up with the horde of youngsters knocking on school doors. Elementary schools have been bursting at the seams since the end of the Korean war, and high school enrollments will start to soar in 1961. Colleges will feel the impact of the postwar baby boom starting in 1965. School and college enrollments rose from under 26 million in 1950 to 36 million this year, and by 1970, the Health, Education, and Welfare Department estimates, enrollments will top 45 million.

The 25-to-34 age group now in short supply will begin reaching retirement age after 1990. As a result retirement costs will slump temporarily, then shoot up a decade later as the postwar babies start collecting pensions. Even by 1980, according to Census Bureau projections, persons over 65 may total 24.5 million, double the 1950 total.

These and other problems lead the Population Reference Bureau's Mr. Cook to take a pretty dim view of this country's jet-propelled growth. "There is certainly some point at which numbers cease to be an advantage," he contends. "There is no doubt that in the U.S., if we continue our present rate of growth, we are going to exceed any likely optimum."

But the Labor Department's Mr. Wolfbein disagrees. Our technological achievements, he argues, guarantee that population growth "won't choke us to death for the next several hundred years. The big problem now is to adjust to the changes." ♦



CORPORATE SYMBOLS GET A FACE-LIFTING

By Jack R. Ryan
Condensed from The New York Times

MAJOR industrial concerns are spending millions developing and promoting new corporate symbols—graphic trademarks they hope will become famous and stamp their company identities unforgettably in the public mind. In the past year or so, dozens of big corporations have modernized old symbols or adopted entirely new ones in an effort to impress everybody with the warmth and distinction of their corporate personalities.

This drive for recognition is spreading. It is estimated that at least 30 large concerns are engaged now in dressing up their "visual profiles"—but keeping their plans under wraps until the symbols are ready to be introduced with fanfare.

An order to an industrial designer usually goes something like this:

"We want a bold, new, eye-catching symbol to use everywhere in our corporation—on letterheads, crates, products, trucks, barges, outdoor signs, advertising, and so on. Just a simple shorthand mark that everybody will recognize instantly and remember. Something authoritative that will suggest our leadership in the field, the quality of our products, and maybe our international growth.

"It must look ultra-modern, but still reflect our long historical tradition of integrity. Above all, it must be unquestionably ours alone."

Sometimes there are other things that must be crammed somehow into that symbol: an airline may want it to suggest safety, or an insurance company wants the viewer to feel "protected" whenever he spots the trade mark.

Developing such a symbol may take as long as two years and cost from $10,000 to $100,000. Ordinarily, its development involves months of research—testing various designs and color combinations with intricate legibility and visibility de-

vices, questioning panels of consumers, advertising men, dealers, and engineers all over the country (and abroad, too, if the products or services are sold internationally) as to how proposed symbols are interpreted.

Occasionally this research indicates that the corporate symbol long used by a company already rates about as high on all counts as any is likely to. For example, no less than ten experienced designers are reported to have advised the Standard Oil Company (New Jersey) not to tamper with its familiar oval device surrounding the letters ESSO. And Eastman Kodak's yellow-and-black color combination is considered too well known and effective to alter.

On the other hand, once in a while a new corporate trademark fails so miserably that it is quietly withdrawn. A large chemical manufacturer quashed one several months ago when it found the symbol was being associated with another company and was looked on as old-fashioned anyhow.

Such instances are rare, because the larger companies usually investigate the trademark matter very carefully before committing themselves.

Some, like the General Dynamics Corporation, have turned to their own art departments or advertising agencies to work out new symbols. But the job is being handed more often these days to experienced industrial design concerns such as Gerald Stahl, Inc., which developed new marks for Jones & Laughlin Steel, U.S. Industries, United States Plywood, and American Hardware, among others; Lippincott & Margulies (United States Steel, Associated Spring, etc.); and Raymond Loewy & Associates (Ansul Chemical and others).

Gerald Stahl, who tackled nine such programs last year and is developing five more at present, noted recently that it was not many years ago that big companies considered it good policy to appear austere, impersonal, and remote.

"This often wound up by creating the impression of indifferent money-grabbing by a cold-hearted giant," he said. "Yet companies selling consumer or supermarket type products long ago learned that a favorable 'image' of their products was vital—if the housewife just doesn't take to the brand symbol, the product won't sell, even if its quality is good.

"Now more and more executives are learning that their corporate symbol is just as important to their company as it is to a package of soap. What a good, solid corporate symbol does is help to establish recognition for the company, its products, and its activities."

The need to modernize lettering, establish a symbol that will serve several diversified divisions of a company as well as the parent concern itself, or to attain more contrast with a competitor's trademark—these are some of the subsidiary reasons for seeking new identity symbols.

As for the future of the corporate symbol, it is widely predicted that more and more pictorial profiles, instead of company names and letters, will be adopted as the identity-images for heavy industrial concerns, just as they are being given increasing emphasis for consumer goods. ♦

Needed: A New Look at OVERSEAS INVESTMENT

By Alexander O. Stanley

Condensed from Dun's Review and Modern Industry

FAST-BREAKING developments abroad and at home promise new incentives to U. S. companies with a stake in overseas business. In many cases, immediate and future programs for overseas investments may have to be upgraded if maximum potentials in sales and profits are to be realized. Here are some of the reasons why:

• The European Common Market is no longer a paper plan. This potential mass market of 165 million people began operations on January 1.

• As a dramatic prelude to the opening of the European Common Market, ten European countries radically altered their fiscal practice to permit convertibility of their currencies in trade interchange with other nations. India, Austria, and Finland have also taken steps toward freer convertibility.

• To encourage and reinforce the free exchange of currency, at least in trade channels, the U. S. government has endorsed, in principle, the proposal to increase the gold and currency holdings of the International Monetary Fund from $9.2 billion to $14.3 billion. This will cushion some of the temporary drains on the foreign exchange reserves of the convertible-currency countries and will give them more time to correct foreseeable trade imbalances.

• The U. S. government has supported a move to increase the capital structure of the World Bank to an aggregate of $20.5 billion, up twofold from existing levels. If approved—and this seems likely later this year—the World Bank will be able to accelerate its lending program.

• Other plans to expand the pool of international credit and capital are being formulated within U. S. government circles. There is the expressed intention to increase the scope of the Development Loan Fund by raising the capital ceiling from its present $625 million level. Last June the Export-Import Bank of Washington asked for and received a hike in its lending authority of $2 billion, increasing funds on tap to $7 billion. But even this now seems inadequate to sustain the current tempo of operations, and there is some talk of plans to go into the open market for more funds (following the pattern of the World Bank).

• Among the major legislative requests for 1959 submitted by President Eisenhower to Congress are (1) a program to double the $500 million limit on insurance for private investors to cover losses from revolution, as well as war or expropriation, and (2) a law to permit U. S. participation in an inter-American development bank.

• Recognizing that credit and capital availability must be implemented by confidence, key U. S. departments and agencies are now busily working on a balanced program, including, among other things, tax concessions to encourage private business to use these expanded credit facilities and also to put their own dollars to work overseas. Here are some of the investment inducements that are being concocted: U. S. tax reduction on business profits earned and retained overseas; simplification and expansion of the overseas investment guaranty program under the aegis of the Export-Import Bank of Washington; accelerated negotiations with foreign governments to ease restrictions on foreign investments.

• Reinforcing these fiscal and legislative maneuvers is a publicity program which promises (1) to sell foreign officials and businessmen abroad on our system of free enterprise, and (2) to alert American management to investment opportunities by broadcasting leads through government media.

Any of these measures is a powerful stimulant to overseas investment. And any combination of these ingredients can create explosive expansion in investments abroad. With pressure mounting to meet the challenge of Soviet invasion of world markets, chances are good that the government will spur our business abroad by every means at its disposal. The rest will be up to U. S. management.

Today, company after company is going into world markets. Many of these moves are made within the framework of expansion programs. But some are defensive in character, made either to reinforce the competitive posture of U. S. brands in certain markets overseas, to tap new sources of extractives or other raw materials, or to produce abroad components of better quality and/or price to be put into "Made in USA" consumer or capital durables.

Whatever the reason, whatever the objective, American management today is becoming more and more aware of the potentials that exist abroad and is busily exploring profit possibilities that can be realized, not only through sales expansion, but also by uncovering new supply sources.

The methodical approach, the constant review of key elements is the only sound approach American management can take to preserve its markets abroad. Here is a broad pattern of factors for management groups to observe in developing a constructive overseas investment program:

• Collate statistical and reference material on overseas areas on a country and geographical-bloc basis.

• Review the experience of U. S. companies that have invested in the country or markets under consideration. Updated lists of U. S. branch establishments usually are available from commercial attaches or trade counselor divisions of foreign embassies in Washington, D. C., or consular offices in principal U. S. cities.

• Hire a press clipping service or develop a system to keep tabs on new overseas investments by U. S. companies in fields related to yours.

• Establish the same practice to keep track of press releases on new loans, new investments, and other new fiscal commitments made by the

World Bank, the Export-Import Bank of Washington, the Development Loan Fund, and equivalent agencies. Also watch for new loans and foreign government bond flotations underwritten by U. S. commercial banks. Particular attention should be given to loans made by the World Bank and other agencies for installing or expanding power, water, transportation, and communication facilities, since these are harbingers of increased industrialization.

• Look for press announcements of current brochures released by foreign governments on investment laws and prevailing conditions. They are usually available from foreign embassies or consular offices in the U.S.

• Review the overseas investment opportunities published by the U. S. Department of Commerce in its publication, *Foreign Commerce Weekly*. Also arrange to receive bulletins posting investment leads published by foreign chambers of commerce functioning within the United States. Lists of these are available from the U. S. Chamber of Commerce in Washington.

• Keep posted on the pending plans for new common markets. Also watch for the possible expansion of the European Common Market to include the United Kingdom, Scandinavian countries, and others. Consider the location of new plant facilities from an area standpoint, within and without the framework of a common market, if this type of market merger is under study by foreign government groups. This may help avoid costly duplication or close overlap of production and distribution facilities.

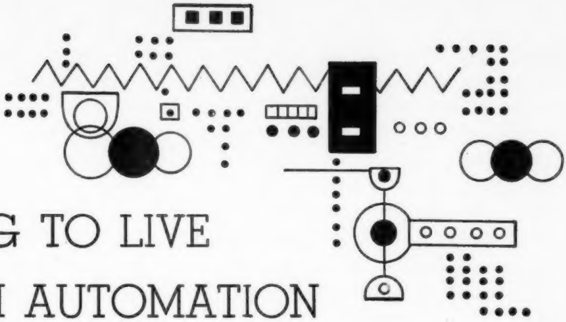
• Finally, don't rush into transplanting assembly lines or distribution facilities into any market where foreign government edicts or regulations threaten or throttle your exports to that area. Of course, it's not always possible to anticipate the timing, the degree, and the persistency of trade embargoes, but, within the framework of any short- or long-range investment program, provision for this type of contingency should be made so that hasty decisions will not compound the hazard. Investment abroad should be a calculated risk — not a blind gamble. ♦

Going My Way?

THE CAR POOL, a widely used device during World War II, is being revived. Large companies are encouraging them for a number of reasons:

1. Car pools tend to reduce traffic congestion on highways leading to plants. Congestion frequently causes tardiness and accidents.
2. Pools ease the jam at company gates and parking lot entrances, and also reduce the number of guards needed at these locations.
3. Pools reduce the area that plants must devote to parking lots.
4. For employees, pools reduce gasoline costs and parking charges, and free the passengers' cars for home use.

—Elmer Roessner in *Business Today*



LEARNING TO LIVE WITH AUTOMATION

By John Diebold

Condensed from Challenge

ALMOST EVERYONE agrees that technological progress is a good thing in the long run. It is the short-run problems raised by automation that inspire controversy. Will it lead to mass unemployment? What will happen to displaced workers? Will the benefits from increased efficiency be equitably distributed throughout the economy?

In the recovery from the 1958 downturn, production has increased at a faster rate than employment. Many have made automation responsible for the disparity in the rates of increase.

At this stage it is very hard to know whether automation can be given the credit—or the blame—for such increases in productivity. It is a characteristic of any organization that after cuts have been made, removing the most inefficient or marginal people and activities, production or output can be substantially increased without a commensurate increase in staff. People work harder and the work is organized so that fewer people are needed to do it.

In addition, some of the unemployment pockets are caused by decentralization. The automobile industry is more and more moving to decentralized operations away from Detroit, thus reducing the area's employment opportunities.

I do not believe that mass unemployment is a likely consequence of automation. I do believe that it is time we stopped arguing the point. Automation cannot be stopped; like other great technological advances, it must be lived with and mastered. Management must stop trying to ignore the problem out of existence. A more positive approach is called for. Labor is fully alert to the problems of automation and will not be moved by statements that it is simply another technological phase that will evolve without any harmful effects.

Management must take its employees into its confidence as much as possible. A British labor official has pleaded: "If men have to change their occupations, let them know what steps are contemplated to train and equip them for new occupations; let

Challenge (May, 1959), © 1959 by Institute of Economic Affairs, New York University.

them know that they are appreciated as human beings and not as so many hands to be hired or fired."

Management, of course, cannot consult its employees about the desirability of automating in the first place. That is clearly and exclusively a management decision. But management should avoid the example of one company, which gave no indication of its intentions to automate until the last moment and did not even bother to pass along the good news that the new machines, far from putting men out of work, would in fact demand additional workers. Only after the workers had taken action which, as they thought, would safeguard their interests, did management explain.

Management's main task is to accomplish the training, and particularly the retraining, of workers who must learn to tend automatic machines or lose their jobs. This is a particularly serious problem for the older worker. He is too old to start fresh on his own, even if he could find someone willing to hire a man of his age. What is he to do when his job is eliminated by a machine? Industry, labor, and the community must join in retraining displaced workers and in finding other jobs for them.

With clerical workers, there will be no serious problem, because of the recurrent shortage of clerical help. The steady rise of manufacturing productivity has not been matched in the office, where the number of pieces of paper to be handled increases constantly, to the point of outpacing productivity.

The major problem, therefore, is with the semiskilled workers. There are still large blocks of them in such industries as machinery, transportation equipment, food, textiles, electrical equipment, and smaller but substantial numbers of them in some of the smaller industries, such as paper, glass, and leather products. We may have to drastically revise our ideas about teaching an old dog new tricks and determine exactly what tricks he needs to be taught.

Although automated plants require highly trained skills for some jobs, skill requirements for actual production-line work may be no higher than they are today. "We run that Cleveland plant with people right off the street. It's easier, not harder, work," a Ford plant executive reported recently. This is a case where individual managements must make a careful study of their needs and balance them against their obligations to their workers and to other aspects of the business.

There is no denying that some workers will be displaced by automatic machines. The problem will be particularly serious in communities with only one or two industries. A firm might decide, for example, to build a new automatic plant in another location, leaving its old community without sufficient job opportunities to absorb the plant's former labor force.

It should be a regular part of planning for automation to give careful consideration to such matters as dismissal pay, training allowances, and other measures to cushion the blow to individuals. Positive management attitudes and performance in these areas can unquestionably do

much to mitigate labor resistance to automation.

Another real problem is deciding how the benefits of automation should be divided. This is a problem the whole economy faces, but it must also be decided by the management of each individual firm. Labor's biggest worry, next to mass unemployment, is that it will not get its fair share of the new wealth automation will create. In an automated plant, individual output ceases to have any real meaning, for the machine sets and follows its own pace.

Should workers who happen to be working for automated industries get the whole benefit of automation? If they do, what effect will this have on workers in industries that are not automated, especially if the industry is not one that lends itself readily to automation? If, on the other hand, such wage increases are granted more or less across the board, wages would outrun productivity increases, and the resulting inflation would harm the whole community.

And what about other claims on the benefits of automation? The consumer, for example, can only gain if prices are lowered. Something must be put aside for further investment, especially since the machinery of automation is likely to become obsolete more quickly than conventional equipment.

This is only a brief sampling of the variety of social and economic problems management must face and solve if automation is to evolve with the least possible hardship. Labor and management, working together, must show foresight, forbearance, common sense, and some degree of mutual trust. Automation, it has been well said, is bound to require a high degree of "social orchestration" in industry. If this can be achieved, the price of automation need not be high, and all of society will gain from the new abundance. ♦

U.S. Foreign Trade: More Buying, Less Selling

DURING 1958, U.S. commercial exports to all major areas receded from the peak levels of 1957, *Foreign Commerce Weekly* reports, dipping to \$16.3 billion—one-sixth below the record \$19.5 billion attained in 1957, and about 6 per cent under the 1956 total.

The European and Japanese booms, the Suez crisis, and other special factors contributed heavily to the magnitude of the 1957 peak, the magazine points out, but their influence was largely dissipated by mid-1957. In 1958, with virtually world-wide shrinkage in demand and consequently sharpened competition for world markets, a reduction of U.S. sales abroad was inevitable.

Imports from our principal raw materials suppliers also declined in 1958, although U.S. purchases from industrial Western Europe and Japan continued to advance. But despite lower prices for a number of commodities, total imports almost equalled the 1957 peak value, falling only 1 per cent to \$12.8 billion. And in volume they surpassed all preceding years.

Embezzlement losses cost U.S. business a billion dollars every year—and most of them could be prevented . . .

YOU CAN STOP EMBEZZLERS

By Charles A. Stewart

Condensed from The Journal of Accountancy

EVERY YEAR, U.S. companies lose over one billion dollars through embezzlement by their employees. In contrast, annual losses from robbery, burglary, larceny, and auto theft amount to less than half a billion dollars.

Can these tremendous embezzlement losses be cut? Yes, if management will pay more attention to devising ways and means to reduce embezzlement opportunities to a minimum.

The area of cash disbursements, for example, is often neglected by management, yet in a recent study of 300 fraud cases in the files of Price Waterhouse & Co., it was found that 74 per cent of dollar losses were effected through cash disbursements. Management frequently overlooks the fact that the majority of transactions giving rise to disbursements originate in departments other than accounting or treasury. While the functions of the latter departments may be subject to elaborate controls, relatively little attention may be given to the processing of source documents before they are approved for payment. Rigid procedures are usually required for a $500 petty cash fund, but a traffic department which spends hundreds of thousands of dollars annually may be relatively free from meaningful controls.

To carry out its responsibility for controlling embezzlement, management must first create a system of internal control. Briefly, such a system requires that the duties of one employee serve as a check on the duties of another employee. No single employee, for example, should have (1) sole access to cash and securities, (2) sole responsibility for originating accounting entries, (3) sole responsibility for making cash disbursements, or (4) sole control over inventories. Although these requirements would appear to be elementary, the frequency with which frauds have taken place in these areas suggests that these basic principles are often overlooked or ignored.

It is not sufficient, however, just to create the system. Management must be constantly on the alert to see that the system continues to function effectively. One way of checking up is to have periodic examinations and reviews by internal auditors. A well-conceived internal auditing program will curtail the opportunities for fraud.

Some companies feel that mechan-

ized data-processing methods reduce opportunities for fraud; accordingly, they fail to install an effective system of internal control when they adopt a new mechanized procedure. This neglect may lead to losses greater than the savings they achieve with the new system. Although machines are immune from corruption and temptation, this may not be true of the people who operate them and who prepare the data they process.

Thorough investigation of job applicants is another safeguard that is often neglected. Such investigation must include inquiries of former employers. Too often it is discovered after a loss has occurred that an employee had been previously convicted of theft or had been denied insurance by a bonding company.

Here again, the responsibility does not end with hiring, as many employees who commit fraud are in positions of trust for a number of years before they embezzle any funds. Alert managers require that all employees take regular vacations, and rotate job assignments as part of their personnel training programs so that one employee's work will come under the scrutiny of another employee.

Constant awareness of employee work habits is also necessary. Frequently, an amazed executive exclaims, "I'm shocked; he was a most trusted and hard-working employee." Subsequent investigation then discloses the employee was there early and late, sometimes over weekends, for the specific purpose of covering up his peculations.

Employers should obtain proper insurance coverage and should periodically review its adequacy. In most situations, the "comprehensive" or "3D"—Dishonesty, Disappearance and Destruction—form of coverage is best. This comprehensive form covers five varieties of risk, including fidelity and forgery. The amounts of coverage desired for the different risks can be varied. The association of surety companies has provided formulas which may be applied in the calculation of a company's "Dishonesty Exposure Index" to determine whether sufficient fidelity insurance is being purchased.

Besides indemnifying employers for losses, fidelity insurance serves as a strong deterrent to fraud. When employees know they may be investigated by an insurance company, they will be less likely to succumb to temptation. Signs informing employees they are bonded are an effective warning. The knowledge that a company has fidelity insurance often deters dishonest persons from seeking employment with a particular company.

Many monumental frauds are perpetrated through forgery, so this type of dishonesty should not be overlooked in a loss prevention program. Although it is true that the law places certain legal obligations on banks not to honor forged instruments, management should not assume that banks have to make good on all forged instruments. In many cases, negligence by the company deprives it of the right of recovery from the bank. Examples of such negligence are: failure to draw checks carefully, examine canceled checks, reconcile bank accounts, properly supervise employees who handle bank accounts, notify banks promptly of forgeries. Most banks also hold the depositor

liable for any losses sustained through the misuse of mechanically reproduced facsimile signatures. The negotiable instruments law of some states holds banks harmless for checks payable to fictitious persons as well as for checks delivered to an impostor as payee.

Any suspicions management has about the reliability of a certain employee should be reported to the CPA's, who can then suggest ways of determining whether fraud is actually being committed. To avoid defamation of character, management must have reasonable proof before preferring charges of fraud against an employee. In some cases, competent detectives should be employed to investigate and obtain acceptable evidence.

Once it has been established that a fraud has been committed, management must fulfill its responsibility of reporting it to the proper authorities. Too often, in its embarrassment, management fails to report a fraud and merely dismisses the employee. Even when the police are called in, many companies refuse to prosecute the culprit.

Fraud results in an enormous annual loss to business and is a particularly insidious form of loss because it strikes from within—often in areas which are ostensibly well managed and carefully controlled. The best protection against this form of loss is management's determination conscientiously to install and maintain good internal controls that will minimize the opportunities for an employee to misappropriate company assets. ♦

The Case for EXECUTIVE ASSISTANTS

By Richard C. Anderson

Condensed from Business Horizons

ARE ASSISTANTS an asset or a liability to the company that uses them? That there's plenty of disagreement on this question is obvious: some companies have assistants for most of their major positions, while others have said firmly, "No assistants!" Between these two extremes are companies that use assistants to varying degrees.

Two types of assistants can be found in most companies that use them at all: first, the personal assistant with a limited set of duties and no major supervisory responsibilities, and second, the full assistant who shares the principal's total responsibilities.

The anti-assistant faction usually levels its fire at the use of full assistants. However, there are many situations in which full assistants can be utilized to advantage. Here are four examples:

1. When the principal has heavy responsibilities outside his own unit. He may serve on committees or may have demanding contacts outside the company, such as with customers or industry associations. The assistant can be useful in relieving him of administrative detail and thus freeing him to assume his outside responsibilities.

2. When the principal has extensive long-range planning responsibilities. For example, an engineering executive with responsibility for planning future facilities may need someone to administer the day-to-day affairs of his department.

3. When subordinates require close coordination on a day-to-day basis—e.g., the tasks of subassembly workers must be coordinated with those of assembly workers to assure a continuous flow of material for production. An assistant in this situation could keep operations going during unavoidable absences of the principal.

4. When a replacement for the principal is being trained, either because of the principal's pending retirement or his transfer to another position.

In many cases, a full assistant is used when the specific situation doesn't really call for one. But the use of assistants has often been criticized on broader grounds:

If the principal would delegate, it is argued, a full assistant would be unnecessary. Better delegation would assign activities to appropriate subordinates, thus leaving the principal with only essential managerial duties. However, while there are undoubtedly many situations where delegation would improve administration, delegation alone is not always enough. Obviously, if all the principal's functions could be delegated, there would be no use for the principal in the first place. But if the position is necessary, an assistant could facilitate management under any of the four situations that have been described above.

It is also argued that the full assistant, by adding another level of supervision, blocks communication. Of course, communication can be hampered by increasing the number of levels; but if the position is needed and if the assistant maintains proper relations with his principal and subordinates, there need be no barrier. In fact, quite the opposite might be true. An assistant can actually facilitate communication if the press of outside matters has made the principal inaccessible.

Further, it is contended that with a full assistant the principal will lose touch with his unit's activities. Actually, the assistant should relieve the principal of routine details and thus give him more time for essential affairs. If the principal does lose touch, the fault lies with the manner of administration—not with the existence of an assistant. There is no reason why the principal cannot keep himself up to date with an adequate system of controls.

Some critics maintain that the assistant position increases administrative costs. The addition of a new position will, of course, add one item of expense; but that position can actually reduce over-all expenses if it permits a greater span of control and thus reduces the total number of principal supervisors.

Others insist that the use of assistants reduces opportunity for advancement. But if the position is essential, it becomes a point of advancement as significant as that of the principal without an assistant. Thus, the line of promotion is merely lowered one level; and further, there are two positions to which members can advance where formerly there had been only one.

The appointment of a full assistant, it is said, puts a "mortgage" on the principal's job. But if the assistant is selected as a replacement and fails to develop as expected, there is nothing to prevent the selection of someone else to replace the principal. In many situations, the assistant should not even be thought of as a replacement for the principal.

When a company does use assistants, on what basis should they be selected?

Qualifications for the assistant may be quite different from qualifications for the principal, and individuals suited for the one job may not be suited to the other. For instance, an experienced professional man may be well suited for an "elder states-

man" role but not at all for supervision.

On the other hand, it seems to be true that some men make better managers than assistants. Unfortunately, the qualities that might make a person a better manager may make him unacceptable as an assistant, and thus close off a natural avenue to a principal position. For instance, if he has a tendency to take the initiative while still an assistant, he may so entangle himself with others' prerogatives as to prejudice them against him as a manager.

Thus, in selecting assistants it may be necessary to look for aptitudes quite different from those required of the principal. A critical factor is the nature of the supervision required of the assistant. Where subordinates' work must be closely directed, the supervisor should have knowledge of the task, preferably with some prior firsthand experience. Since this type of supervision may require close adherence to schedules and work standards, the most effective assistant here may be the orderly and systematic person. In other cases, the assistant's primary job may be to stimulate group effort by building loyalty to the supervisor and/or to the group, and by developing a creative environment. The most successful assistant here would probably be one with a warm, outgoing personality. In still other cases, particularly at top-management levels, the assistant would exercise little supervision over specific tasks, but would coordinate and balance the activities of major segments and integrate them into a company-wide effort. Building loyalty and stimulating performance would appear to be less critical at this level; success would rest upon analytical, creative, and innovative patterns.

When based on real need, the position of assistant can make a substantial contribution to efficient and economical operation. It is for management to use sound judgment in deciding the requirements of each individual case. ♦

A Business in Billions

U.S. INDUSTRY'S "Billion Dollar Club" lost only three members during the recent recession. Membership, which is gained by companies achieving at least a billion dollars in annual sales, dropped from 47 to 45 in 1958, one of the three dropouts being replaced by a new member: General Foods, whose sales rose from $986 million in 1957 to $1 billion last year. The three corporations which slipped out of the select circle were North American Aviation, which fell from $1.3 billion to $904 million; Republic Steel, from $1.2 billion to $910 million; and Armco Steel, from $1.1 billion to $868 million.

The club's top five performers in 1958 were: General Motors, $9.5 billion; Standard Oil (N.J.), $7.7 billion; American Telephone and Telegraph, $6.9 billion; Great Atlantic & Pacific Tea Company, $5 billion; and Ford Motor Co., $4.1 billion.

—*News Front* 3/59

The farm market is rapidly expanding, and there are profit opportunities for companies that know how to reach it with their advertising . . .

How You Gonna Sell 'em DOWN ON THE FARM?

Condensed from Printers' Ink

FARMERS represent a rapidly expanding market with incalculable opportunities for companies that know how to use farm publications and the other media that reach farmers best. Companies making farm equipment and supplies, which defied the recession to achieve a startling 17 per cent increase in manufacturers' shipments last year, seem determined to set still greater records of sales and production. For the time being, at least, they are ignoring the general assumption that 1959 is due to see a sales decline in their field.

Bold, expensive advertising campaigns have been sparked by the hot competition for the farmer's dollar:

- A. O. Smith Co., a major industrial manufacturer, increased its farm advertising budget for 1959 by 50 per cent to intensify promotion of a storage system designed to make haymaking obsolete.

- Flavor Corp. of America, whose president once chewed grass for weeks to find out what cows like about it, expanded a sales campaign aimed at persuading farmers to put "livestock's favorite flavor" in their feed.

- Ford's tractor and implement division last month put on the first closed-circuit TV demonstration of farm equipment for its dealers from coast to coast. This demonstration took place on a farm specially planted last November, and included the reaping of corn grown by electric light under a polyethylene tent.

In 1958, farm income went up to about $38 billion, of which farmers spent perhaps $26 billion on business purchases. For the first time in history, the per-capita income of everyone living on a farm went above $1,000.

Much of this tremendous aggregate buying power is being channeled by the farmer into machines, materials, and services. In 1958, farmers spent about $4.9 billion on capital goods. It was widely predicted that such purchases would drop by 5 to 10

per cent this year; one estimate for 1959 was $4.5 billion. Even that would mean a much better year for the farm equipment industry than '56 or '57. But so far in 1959, the expected retrenchment hasn't happened; implement dealers report an increase in sales of up to 25 per cent. Recently, president William A. Hewitt of Deere & Co. said, "Production is still scheduled on the basis that sales this year should be somewhat greater than in 1958."

The major share of the equipment market belongs to the companies that produce full lines of farm machinery: International Harvester, John Deere, Allis-Chalmers, Ford Tractor, Massey-Ferguson, J. I. Case Co., Minneapolis-Moline Co., Oliver Corp. These companies have an estimated 60 per cent of the industry's total sales volume and, in most years, have fostered that predominance with substantial appropriations for advertising. Last year International Harvester, the traditional leader among full-line farm-equipment firms that advertise in farm publications, spent $1,565,603 promoting its equipment in that medium. The company has announced that this year its spending for space and time will be even greater, and that new themes will be introduced to accompany a number of mechanical innovations in their equipment.

Typical of the aggressive ad approach of the eight giants are the 1959 plans of John Deere Co., which is seeking added impact by increased use of color. John Deere's own farm magazine, *The Furrow,* is now printed in four colors. In addition, this company is going in for more four-page, full-color inserts in the farm magazines, alternating with full-color double-page spreads.

Meanwhile, there is a parallel increase in advertising by makers of specialized farm equipment. James Manufacturing Co. is successfully promoting a mechanical feeder to go with its established line of silos. Ads for antibiotics, feeds, and other chemical products bulge the farm periodicals. In the next decade there will be intensified promotion of specialized machinery and other specialized goods and services in all farm media, keeping pace with the increased specialization of the farmer himself.

It's a platitude that the introduction of machinery multiplied the productivity of the American farm. But almost all of the gain has been in the grainfield; relatively little in the "farmstead," the area where crops are processed and stored after harvesting, and converted into livestock products.

"This is our target," says George Seferovich, leading agricultural economist, writing in *Implement & Tractor,* a national magazine covering the farm-equipment industry. He is convinced that farmstead operations must be made as efficient as field operations, through the use of machinery and production systems.

Students of the farm market say that while the farmer urgently needs the new materials-handling equipment, the job of getting him to buy it is different from any sales assignment in the past. Such equipment involves integrating a system of mechanical units, frequently powered by electricity (in contrast to the

conventional internal combustion farm engines), and often represents advanced forms of automation. So the sales job must be done by someone with technical competence, and the farmer must be assured that he will have available the continuous servicing that such an engineering system involves. One of advertising's tasks in the new farm market is to explain these things to both farmer and dealer. Sales and service are factors for which the manufacturer thus takes an increasing responsibility.

Farm publications, from the national farm magazines to state and local periodicals, are the key medium for selling the farmer. More than one market test has shown that even when a farmer spends less time reading periodicals than he does listening to broadcast media, he counts on them as his main source of information on farming, including market facts. At the same time, advertising can exploit the fact that farmers (like other listeners) become particularly attached to specific radio stations and programs, and that these can develop extraordinary selling power either as primary media or in support of a print campaign.

The increasingly lavish, high-powered ad campaigns directed at the farmer undoubtedly represent the beginning of a long-range trend. Support for this prediction can be found in Department of Agriculture studies that indicate that the growth in demand for farm products may, in the next two or three decades, amount to 35 per cent. This will call for a corresponding increase in farm output, by about 1975, when farmers' equipment purchases may have multiplied three or four times.

In tomorrow's market, as in today's, success will be greatest for the advertisers who:

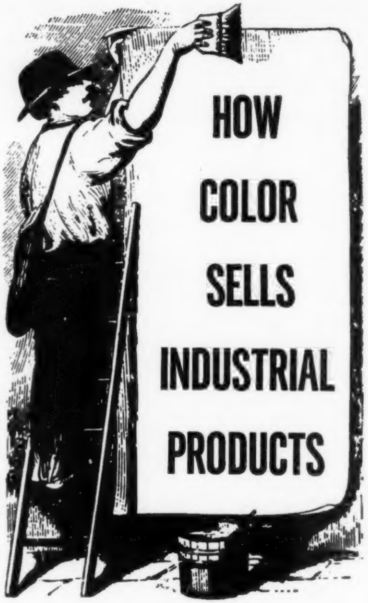
• Integrate advertising with all other marketing factors, including the training of salesmen and the provision of service, so as to link everyone—retailer, manufacturer, banker, and agency—in a promotion program based on the latest advances in farm technology and farm chemistry.

• Realize that, to sell the farmer, you also have to sell the dealer and the distributor—and even the consumer of farm products. ♦

Trust Fund Investment in Common Stocks: A Survey

THE PORTFOLIOS of the 300 common trust funds administered by banks show no undue concentration on the common stocks of a few companies, according to a recent study by *Trusts and Estates* magazine. Only eight stocks were held by more than half the funds at the end of last year, out of a total of 675 stocks held.

The aggregate valuation of the 102,051 (a jump of 15,684 over 1957) individual trust accounts under $100,000 each was $2,406,935,000, representing an increase of $438,128,000 over the 245 funds tabulated the preceding year. Common stocks represented 57 per cent of the 183 discretionary type funds, 32 per cent of the 62 restricted type funds, and 98 per cent of the 28 common stock funds.



HOW COLOR SELLS INDUSTRIAL PRODUCTS

By George P. Nicholas
Condensed from Sales Management

INDUSTRIAL PRODUCTS are blossoming out in color. More and more companies selling to industry are discovering that color, if it is used with imagination and purpose, can give a product an effective edge over competitors.

How is color being used in products for industry?

Color helped the Crescent Co., Inc.(Pawtucket, R. I.), break into the private-label battery cable market. Says Kenneth R. MacLean, general sales manager:

"Four years ago our competitors had virtually sewed up the battery cable business with the major oil companies. We had but one customer. Then we hit upon the idea of supplying the insulated cable in the oil company's color. For instance, green for Cities Service, blue for Sunoco, orange for Phillips or Gulf.

"Today we sell all but one major oil company of those that engage in their own marketing activity. Total volume in our automotive division increased by about 35 per cent and we credit color merchandising for opening the door to the market."

Crescent is also using color to code five lines of fixture wires sold to the electrical market. Both the product and packages are in color, enabling customers to reorder at a glance.

With color, companies can make their products serve as advertising billboards. National Supply Company's oil drilling machinery, for example, can be recognized from a distance because of its well-defined color scheme. The base color is blue, with yellow accents on the bobbing "horseheads" and revolving counterweights of the pumpers, on the rapidly spinning spools of drilling rigs, and on controls like throttles and brake levers. The blue-yellow theme is used throughout National's packaging program for smaller equipment and parts.

The American Chain Division of American Chain & Cable Co., Inc., uses pressure-sensitive tape in colors to code different grades of its chain.

"Each chain has a specific strength, and the customer may easily use the wrong chain for a job unless it is clearly identified," says William B. Ilko, sales manager.

Sometimes industrial color is used for psychological reasons. An example is the broad band of black that rings the lower half of every new Hyster Co. lift truck. The reasoning behind this device runs this way: An operator wants the truck to be maneuverable—yet stable. When a full load is balanced high overhead he wants the truck to turn on a dime in the tight quarters of a warehouse or factory—but he wants the truck to hug the ground. The black band at the base accents the truck's low center of gravity and thus gives the driver a feeling of security.

Warren Co., Inc., is selling commercial refrigerators in color by showing customers what color does for their products. The company recommends a mint green refrigerator for the meat display (mint green causes a red after-image, making for meatier-looking meat); raspberry color for frozen desserts or ice cream; sunlight yellow for fruits and vegetables.

When it comes to machine tools, there is growing opinion that color can help customers use the product more effectively. Du Pont, which produces machinery enamel, emphasizes two machine-tool color concepts: "Color conditioning," an industrial decor that lessens eye fatigue and produces more harmony behind the turret lathes, and "Safety color code," a program to designate generic machinery parts by using specific colors.

Proper use of color will eliminate glare from light sources and spread light into the shadows, the paint makers say. They hold that machine operators should not be expected to work at peak efficiency if the materials being fabricated are the same color as the machine's working parts. Too much contrast, on the other hand, is as bad as too little.

Despite these efforts to promote color in machinery, none of the six machine-tool companies questioned recently by *Sales Management* reported any strong activities in selling color. L. T. Matthys, advertising manager of National Automatic Tool Co., Inc. (Richmond, Ind.), reported that only one of 20 orders requests special colors. A spokesman for Philadelphia's R. D. Wood Co., said, "The color of our equipment is rarely discussed."

There are, of course, pitfalls in the use of color for industrial products. It can create higher manufacturing costs and serious inventory problems. It can even prove disastrous in export areas where a particular color may have negative connotations.

Deciding how many and what colors to offer is a perplexing problem. For example, three colors (ivory, beige, green) account for 74 per cent of color telephone sales, while five other colors share the remaining 26 per cent. In plastic and ceramic wall tile, three of the 12 color groups have 40 per cent of the sales volume.

Color presents production problems, too. American Telephone and Telegraph and Western Electric had to color-match four different materials—phenolic handsets, cellulose acetate butyrate stands, metal dials, and rubber cords—to bring out color telephones. ♦

When Management Speaks . . .

GUIDES TO GETTING ACROSS

By Louis Cassels

Condensed from Nation's Business

When management is talking—whether it's trying to sell goods, to promote a new company policy, or to explain its side of a labor dispute—its words will carry greater weight if it observes a few sound rules of communication. People in our society have been subjected to so much high-pressure promotion that only the most effectively told story will be persuasive. Here are some points to keep in mind:

1. *Be as factual as possible.* You win more converts with information than with exhortation. The only people who are likely to accept sweeping assertions of opinion are those who already agree with them. But facts, calmly and accurately presented, carry weight with nearly everyone, including those who may be prejudiced against you. Many of business's attempts to communicate with the public suffer from an argumentative, propagandistic tone. People will listen to your side of the story only when you offer them evidence upon which to make up their own minds.

2. *Admit your mistakes.* Nothing builds credibility for your communications more effectively than a consistent record of admitting it when you've made a mistake.

There are several corollaries to this basic principle. One is to speak up quickly when you have any confessing to do. You won't get any merit badges for candor if the truth has to be dragged out of you, bit by bit. By hedging and postponing and trying to cover up as long as you can, you will only succeed in giving the newspapers a good running story, instead of a one-edition headline. By the time the facts are finally brought out, the public will be conditioned to believe that you must have done something pretty heinous.

3. *Don't overstate your case.* Communication specialists are virtually unanimous in saying that it is much better to understate your case than to seem to overstate it. Oren Stephens, propaganda analyst who heads the research division of the U.S. Information Agency, says understatement is a particularly effective tool of communication in the present climate of public opinion, which is characterized by a widespread cynicism.

"People are getting intensely weary of exaggerations," he says. "They

have been subjected to the big-lie technique so often that they have developed a powerful resistance to any statement that seems incredible in the light of their own knowledge and experience.

"It is difficult to prove a point that your audience instinctively doubts, even if the point is true. Rather than embark on such an effort, it is usually better to tone down your claims a little, to bring them well within the limits of popular credulity."

4. *Keep the interests of your audience in mind.* The most persuasive messages—indeed, the only kind likely to have any impact—are those given in terms of the audience's own concerns. In the opinion of some leading public relations counselors, most business communicating is particularly weak in this respect.

One reason for this weakness may be that too few businessmen really understand the viewpoints of the people they're trying to persuade. The public consists predominantly of wage-earners, consumers, small businessmen, and others whose opinions on economic issues are not likely to be readily grasped by a corporation executive who talks only to his fellow managers. If management really wants to communicate with people in their own language, it must get to know them well enough to identify projectively with their viewpoint.

5. *Be a semanticist.* "If I could give businessmen just one piece of advice on improving their public communications," said a veteran Washington correspondent recently, "I would urge them to learn something about semantics. They should explore the meanings of words—not merely the dictionary meanings, but the emotional freight they carry, the reactions they cause in the minds of various types of people."

Politicians and newspapermen have an instinctive appreciation of the power of semantics that businessmen would do well to emulate. President Franklin D. Roosevelt's controversial proposal to increase the membership of the Supreme Court provides an example. FDR presented it as a plan to "reform" the court. Senate opponents promptly—and effectively—labeled it a proposal to "pack" the court.

Too often, business allows itself to be maneuvered onto the losing side of a game of semantics. Many of the terms on which business relies heavily are low in semantic appeal. The recent attempt to popularize "private capitalism" has not been successful, but at least it is a step in the right direction.

6. *Use a constructive approach.* Too many business messages to the public are essentially negative. They voice dire warnings, or criticize what others are doing without offering constructive alternatives. This approach runs contrary to an ancient axiom of practical politics: "You can't beat something with nothing."

Recent psychological research, conducted at the University of Illinois under a grant from the National Institute of Mental Health, supports the belief that little can be accomplished by a scare technique. The university's Institute of Communications Research sought to determine, through extensive interviews and psychological testing, what kind of messages are most effective in trans-

mitting information about mental health to the general public. It identified three variables which had a substantial effect on people's interest in, and receptivity to, a particular message.

One was the factor of personal concern already discussed here. People were most interested in mental health information that could be applied to their own situations ("What are the symptoms?" "What can I do to avoid a nervous breakdown?")

The other factors were the "anxiety content" of the message and the degree to which it offered a solution to a problem. If a message was high in anxiety content—that is, in scare value—and offered no solution, interest dropped sharply. People simply tuned out a message that frightened them without showing them a way out.

7. *Support your words with action.* Product quality; fair treatment of employees, customers, and competitors; and a demonstrated concern for the public welfare are policies that build a reputation for integrity which will do more than anything else to insure you a sympathetic audience.

Several communication authorities note that it is not enough to keep your own record spotless. Through trade associations and chambers of commerce, company managements should work for a high level of ethical conduct throughout their industry and in business generally. ♦

"There's real American know-how."

COLLEGE RECRUITING: IT'S A BUYER'S MARKET

Condensed from Business Week

WHILE INTERVIEWING seniors on the Georgia Tech campus recently, a Procter & Gamble Co. plant manager saw something brand new in his recruiting experience: a flip-chart presentation prepared by a senior to show what he had to offer a prospective employer.

This incident is indicative of the attitude on most college campuses this spring. Students now going through the interviewing routine with corporate recruiters are not so sure the world is their oyster. In fact, *Business Week* reporters surveying the job outlook for seniors and graduate students all over the country found that many were worried.

Many of them have good reason to be, the survey shows. There is no boom this year in college recruiting. Above-average engineers and scientists are still in demand, as are top-notch students at high-prestige schools. But industry's pursuit of the others is far from frantic.

It's true that the number of companies recruiting at most colleges is equal to or above last year's. The additions include some manufacturing companies that dropped out last year, as well as some smaller companies that figure the current market is favorable for them. Northwestern University, for example, is getting truckers, medium-sized banks, and retailers. Government demand is strong at the University of Michigan, and the City of New York this spring began a program of recruiting civil engineers, accountants, statisticians, and actuaries on local college campuses.

In addition, fewer companies are cancelling scheduled recruiting visits this year. Last year, cancellation rates were high. At Columbia University, for example, 81 companies backed out; this year only 34 have.

This suggests that company hiring plans are firmer now than they were a year ago at this time. But in only a few cases do these plans match those of 1957. And a number of companies are hiring almost no one.

Fairly typical, a number of college placement people think, are companies such as Aluminum Co. of America and Continental Oil Co., which are looking for more than twice as many graduates as last year but fewer than they sought in 1957. Most placement directors see improvement over last year but not so much as might be expected in view of general business conditions. The chief added push comes from defense contractors.

Defense contractors, of course, are looking for technical personnel. Engineers and scientists are still hot items on the job market, as the sideline recruiting activity at the recent Institute of Radio Engineers convention in New York clearly demonstrated. On and off the campus, companies are looking for technical personnel for research, development, design, testing, field engineering, and sales engineering. And now that experienced engineers are starting to change jobs again after the recession scare, companies need beginners to fill their pipelines.

At the University of California at Los Angeles, 80 per cent of the recruiters want engineers; at the University of Southern California, it's 75 per cent. Alcoa wants 90 per cent of its recruits to have technical training; U. S. Steel, 70 per cent; Westinghouse, 95 per cent (it was 75 per cent in 1957).

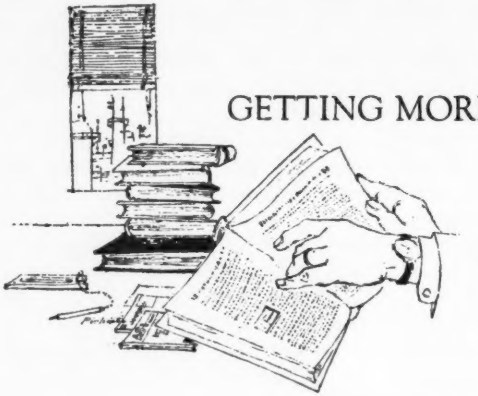
In the nontechnical fields, recruiters are stressing accounting, sales, and marketing, including marketing research and merchandising. Good accountants are scarce—so scarce that some companies expect to hire management, finance, and economics majors and turn them into accountants. For sales, recruiters will take marketing majors, general business students, and liberal arts graduates.

Liberal arts students not interested in sales have to aim for the relatively few general administrative training programs in large companies, or go into banks, utilities, insurance companies, and other service industries. Most often, the colleges say, these organizations are local and the students negotiate jobs on their own.

Starting salaries are still going up. Nontechnical people will get 2 per cent to 3 per cent more than last year. Figures mentioned range from \$400 to \$425 a month, with top accounting majors likely to get around \$450.

Estimates of the boost in salaries for beginning engineers range from 2 per cent to 5 per cent. Companies seem to be planning to pay around \$500 a month for technical seniors and around \$600 for Ph.D.'s

Defense contractors in some cases are offering as much as 10 per cent above last year and may push the market for the better mechanical and electrical engineers to around \$600 a month. Demand for this group, says Westinghouse, "seems to be approaching the 1957 level." Otherwise, companies are attributing higher salaries to the influence of rising union wage rates rather than competitive recruiting. ♦



GETTING MORE VALUE FROM THE COMPANY LIBRARY

By Irene M. Strieby

Condensed from Harvard Business Review

ONE OF THE GREATEST assets management can have is information, and one of the best sources of information it can have is a good company library. Like plant, equipment, and other physical assets, the company library must be up to date; and like the executives and workers who make up the personnel assets of a firm, a library thrives on change, challenge, and the satisfaction of meeting specific, carefully defined needs. What principles should guide the development of a company library? What should it be expected to do?

The first step is to take a careful look at the company itself. If the ultimate objective is the development of an efficient information center, then it will be useful to make a survey of methods currently being used to convey information to each department. What kind of facts and figures does each department need, and how does it go about obtaining them at present? Only through this kind of examination can an effective intracompany information program be set up with the library as its hub.

Another basic step is a careful determination of how much useful information is gained through the executives' own reading. There may be information that would be helpful to them if it were available with less expenditure of time and effort than is now necessary to get it. Further evaluation of the needs, desires, and reading habits of all probable users of the library will provide a realistic basis for determining the type of information service required by the company. Thus:

Having been informed of management's concern with the maintenance costs of industrial buildings, the librarian of a West Coast oil company purchased a book on industrial painting published by the Steel Structures Painting Council. Shortly afterward, a disagreement arose in the engineering division over what type of paint to use and how to apply it. Consulting the new book, the librarian was quickly able to produce

for an engineer a specification in print which allowed him to prove his point, thereby saving the company $7,000 on the job at hand.

What will the place of the library be in the firm's organizational structure? This must be determined at the very beginning and will, of course, vary from one company to another. In general, the degree of support given to, and the objectives set by management for, the information program will establish the library's position on the organizational chart. If an effective contribution is to be made, there should be a direct line of communication between the library and the management team.

In fitting the library into the organizational scheme it is important to recognize that if the library is established primarily for the benefit of one department, such as personnel, market research, or engineering, it naturally will become an integral part of that particular department. It will then be difficult to provide a company-wide information program, since other segments of the company may not feel free to make full use of the service. Therefore it is essential for the library to occupy a strategic spot in the organization—one where it can function effectively for all parts of the business.

What should the library have in its basic working collection? Because of the enormous and constantly growing literature on business and related fields, there must be a careful selection of all items. Books, periodicals, pamphlets, films, and government documents for a company library cannot be collected casually or by the same procedure as one might follow in collecting stamps. Nor should an attempt be made to accumulate everything published in a given field. No company library can ever be completely self-sufficient. It is, rather, a *basic and current* collection of printed materials. Of course, data peculiar to the company and to the industry of which it is a part must be readily available if the information center is to be effective. But only materials which meet the test of productivity in terms of use should be included.

What can the company library do to aid all levels of management in keeping informed? One vital point is that the librarian must be made aware of the plans and problems of every group so that its information needs will be fully understood and anticipated. No effective information program can be carried on in a vacuum. Similarly, the best collection of materials is of little value unless those who need them know they are available. Here is the kind of thing that can happen:

A librarian was told by a chemist in a steel rolling mill about an experiment in the company laboratory which had solved a tough problem—at a cost of $10,000. The chemist listened in dismay as the librarian told him that the Germans had previously conducted the same experiment and that their complete report was on file. This report on the library shelf cost less than $5.

To meet this communication problem the library can provide daily news briefs, weekly abstract bulletins, reproductions of tables of contents of selected journals, periodic listings of new materials received in the library,

or memos directed to specific individuals concerning items known to be of particular interest to them. Any or all of these methods may be required to meet the information needs of a particular company.

Personnel and physical facilities play central roles in the success of the company library. The director must be a librarian who is highly skilled in human relations, communication, and administration. He must also have a good deal of initiative and imagination, a deeply felt interest in helping others to find what they need, and an understanding and appreciation of company objectives and problems. In return, the librarian should receive the recognition and salary commensurate with the contribution he makes. And he should be responsible for choosing his staff, since he alone knows exactly what kind of personnel will be needed.

Since it has to supply vital business information to executives, the library should be located in the administration building, near the main flow of traffic. This site will ensure accessibility and prompt delivery. In addition, the original plans for the library should provide for expansion, for the library must grow as the company does. If this provision is not made, sacrifices in availability of required material will have to be made, to the detriment of the program's effectiveness.

The company library can help management keep up to date by performing these services:

- Communicating information rapidly, accurately, and economically.
- Supplementing printed resources on hand by using other libraries.
- Assisting in gathering facts for a company's many publics: suppliers, customers, shareholders, employees.
- Cutting needless duplication by centralizing information materials.
- Increasing profits by contributing ideas useful to the daily operation of the business. ♦

More Jobs for the Handicapped

DESPITE THE RECESSION, 1958 showed substantial progress toward the elimination of job discrimination against handicapped persons. For the third consecutive year, a new record was reached in the number of disabled persons rehabilitated to employment through the State-Federal vocational rehabilitation program. The 1958 total of 74,320 disabled persons rehabilitated and successfully placed in employment was 3,380 more than the 1957 figure.

During the recession, physically handicapped persons found no more difficulty in obtaining employment than the nonhandicapped. Commenting on this encouraging trend, Milton Cohen, executive director of the Federation of the Handicapped in New York City, said recently, "The attitude of employers is changing; it is no longer as difficult to convince them that a physically handicapped person does not have to have special favors when he is placed on a job."

—Howard A. Rusk in *The New York Times* 1/12/59

A NOMA poll of almost 4,000 companies reveals how U.S. business employs punched cards, IDP, and EDP systems . . .

WHO'S USING OFFICE AUTOMATION?

A Survey of Company Practices

By W. J. Jacquette
Condensed from Systems Magazine

How WIDESPREAD is the use of office automation in today's business? What kind of companies are using it, what class of equipment are they using, and for what kinds of paperwork? Where are they going from here?

Some significant, and sometimes surprising answers to these questions have been provided by a survey made recently by the National Office Management Association. Prompted by the dearth of comprehensive statistics on actual usage of the new data-processing techniques, NOMA sent questionnaires to more than 14,000 of its member companies—firms representing virtually all kinds and sizes of business. Almost 30 per cent, 3,936 companies in all, sent back usable replies.

Office automation, as defined in the survey, was broken down into five basic types: mechanical punched-card processing; integrated data processing (meaning the use of linked common-language machines); and three classes of electronic data processing systems—"small" (costing less than $50,000), "medium," and "large."

Punched-card installations were reported in 33 per cent of all the responding companies. Five per cent had common-language or "integrated data processing" installations.

Less than 3 per cent of all companies reported having electronic data-processing at the time of the survey. An analysis of these reveals several interesting points. Only one company out of every 656 reporting (.15 per cent) had the smallest class of computer. No more than 1 per cent of companies in any type-of-business classification had this kind of equipment, and the figure was less than half of 1 per cent in such fields as insurance, food, tobacco, and drug companies.

Medium-sized computers, defined as those costing between $50,000 and $500,000, are without question the workhorses of the office field. Insurance companies and electrical manufacturers led the field with 9 per cent each, followed by petroleum products manufacturers with 6 per cent. One

Systems Magazine (January-February, 1959), Sperry Rand Corporation.

company out of every 246 (.4 per cent), reported having a large computer in the million-dollar-or-more class.

The distribution of machine installations by size of office followed a predictable pattern: every company with more than 5,000 office employees reported some form of clerical automation, as did 96 per cent of companies with more than 1,000 office workers. Only 5 per cent of the companies with office staffs of less than 26 persons reported using such equipment.

A somewhat unexpected pattern was found in the reporting of integrated data-processing installations: 17 per cent of the companies with more than 5,000 office workers reported such use, yet this type of equipment was reported in 23 per cent of firms in the next smaller category: firms with more than 1,000 persons.

There was evidence that the use of medium-sized computers may soon approach that of punched-card installations among the largest companies. Fifty per cent of the firms in this bracket reported using medium computers. The figure dropped to 25 per cent in the 1,001-5,000 employee group, and to 18 per cent in the 1,000-or-less category.

An impressive 42 per cent of the companies with more than 5,000 office workers reported installations of full-scale electronic computers. Among the medium-sized companies the figure dropped to 7 per cent, and no company with an office staff of less than 251 reported using a big computer.

How are companies using office automation? Among punched-card users, the average company reported six applications. Sales statistics seemed to be the most popular, with payroll running a close second. Inventory processing came third, followed by accounts receivable, general accounting, and expense and property accounting.

Companies using integrated data-processing averaged two applications. Order-invoice procedure led the field here by a wide margin, followed by sales statistics, accounts receivable, and cost accounting.

Payroll was the favorite application among users of medium-sized computers. Runners-up included expense accounting, securities accounting, property accounting, engineering computations, inventory, general accounting, and dividend calculations.

Engineering computation was by far the most popular application reported for large-scale computers. Among clerical applications, payroll and inventory tied for the lead, with various other applications closely bunched behind.

Another significant set of facts emerging from the survey concerned the types and quantities of additional equipment currently on order or under study by the reporting companies. Of all the firms having punched-card installations, for example, 45 per cent reported that additional machine equipment was on order. Of all those with integrated installations, 22 per cent had ordered more equipment, and 19 per cent reported that they were studying the feasibility of ordering more.

Of companies with small electronic systems, 17 per cent had additional equipment on order, and 23 per cent of the companies with medium-sized

computers had additional machines on order. Among users of the million-dollar-plus class computers, 38 per cent said they were either ordering one or more additional computers or had decided to switch, either to another large-scale system or to one with an even larger capacity.

What will the future uses of office automation be? For punched-card installations the projected application most frequently mentioned was payroll—meaning that if current plans are carried out, payroll will replace sales statistics as the most popular punched-card job. For integrated installations, the order-invoice application was the most commonly planned at the time of the survey, with sales statistics running second.

In the case of medium electronic computer installations, a noticeable switch appears to be in the wind: 40 per cent of the companies plan on adding accounts receivable as an application, a move which would put payroll in second place. Among companies with medium systems on order but not yet installed, inventory was most frequently mentioned.

Users of large-scale computers expressed a significant interest in inventory as their next planned application, a trend which would drop engineering statistics to second place. The percentage of payroll programs will more than double among big-computer installations if current plans are carried out; other applications being planned for significant percentages of existing installations are production control, accounts receivable, commission computation, and general accounting.

Companies reporting large-scale computers on order are planning on a markedly different application program, according to the survey. Sixty-eight per cent of these companies intend to do inventory; 67 per cent plan general accounting, and half are planning to do accounts receivable. ♦

Rally 'Round Which Flag?

WHEN CONGRESS voted recently to admit Hawaii as the 50th state, the country's flagmakers fluttered into a brisk but short-lived flap. They feared that some $1 million worth of new 49-star flags might become obsolete even before they could be unfurled for Alaska's entry into the Union on July 4. They breathed more easily when Gov. William F. Quinn said that Hawaii didn't even intend to try to qualify by that date. In fact, Hawaii probably won't be proclaimed officially a member of the Union until July 4, 1960.

What's more, president Digby W. Chandler of Annin & Co., which makes about half of all U.S. flags, promptly pointed out that 49-star flags —and 48-star flags, for that matter—remain perfectly legal as long as they are in good condition. "Oddly enough," Chandler said, "we're still selling 48-star flags every day." Richmond's Sherritt Flag Co., meanwhile, breezed through the short crisis unconcerned. "We've decided to make Confederate flags," said a company official. "The design hasn't changed in 100 years."

—*Newsweek* 3/23/59

BRIEF SUMMARIES

of other timely articles

GENERAL

IS THE WORLD "GOING AMERICAN"? *U.S. News & World Report* (2300 N Street, N.W., Washington 7, D.C.), March 23, 1959. 25 cents. Hula hoops spin in France, "honour" becomes "honor" in Norway, and "The Lone Ranger" rides again (on British TV sets)—these are but a few of the many U.S. influences at work abroad, according to this article, which describes a world-wide adoption of the American way of life going hand-in-hand with rejection of Soviet patterns.

PLANNING TOMORROW'S PLANTS. *Dun's Review and Modern Industry* (99 Church Street, New York 8, N.Y.), March, 1959. Reprints 30 cents. This special five-part report to management highlights fresh trends and practical techniques in planning, designing, and locating new plants in the 1960's, in addition to a survey of 107 manufacturing concerns showing an average planned increase of 35 per cent in plant capacity.

ROAD BLOCKS TO COMPANY GROWTH. By Allison V. MacCullough. *Advanced Management* (74 Fifth Avenue, New York 11, N.Y.), February, 1959. $1.00. The problems of staffing an expanding organization with qualified men are pointed up by specific case histories of companies that remained at a standstill because of inadequate concepts of organizational planning and management development. Advocating long-range planning which encompasses complete knowledge of capital requirements, research and engineering needs, size and demand of market, and competitors, the author pinpoints problems of decentralization, provides a checklist of criteria for organizational arrangement, and presents a plan of action for continued education for managers.

PRODUCTION

COORDINATED MAINTENANCE. By Lester G. Stine. *Chemical Engineering* (330 West 42 Street, New York 36, N.Y.), March 9, 1959. 75 cents. A new approach to maintenance organization problems is presented here—one that utilizes a maintenance control center, integrates planning with labor measurement, sets up procedures specifically directed at uncovering opportunities for labor cost reduction, and emphasizes the coordination of all maintenance activities. Now in use at several large pulp and paper mills, the technique is credited with improving maintenance service, reducing down-time on machinery, and reducing labor cost—in one company, it effected a maintenance man-hour reduction of 40 per cent, saving $200,000 annually.

INDUSTRY'S INEXCUSABLE ACCIDENT TOLL. By Clayton F. Van Pelt. *Business Horizons* (School of Business, Indiana University, Bloomington, Ind.), Spring, 1959. $2.00. During an average day, 62 workers are killed, 350 are injured permanently, and 7,600 more have suffered injuries that will keep them off the job for about 18 days, the author reports, pointing out that this staggering toll is by no means

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necessary, but can be sharply reduced by the adoption of effective safety controls. In this article, he outlines the basic fundamentals of industrial accident prevention, including such aspects as evaluation of problems and performance, employee selection and placement, training and education, supervisory responsibility, care of injured employees, accident investigation, personal protective equipment, and sources of technical assistance.

FINANCE

AUTOS AND TRUCKS: DOES IT PAY TO LEASE THEM? By Leonard Sloane. *Purchasing* (205 East 42 Street, New York 17, N.Y.), March 2, 1959. 75 cents. Operating leased cars is generally less expensive than reimbursing *high-mileage* salesmen for the use of their own cars, but it is more expensive in the case of *low-mileage* salesmen, with the break-even point between 20,000 and 30,000 miles per year, says the author in this discussion of the advantages and disadvantages of transportation leasing. He describes two well-established types of automotive leasing plans—the complete maintenance plan and the finance leasing plan —and a relative newcomer called the all-expense plan, which includes everything necessary but the driver for as little as 7½ cents per mile for high-mileage users.

HOW TO ASSESS INVESTMENT PROPOSALS. By Robert H. Baldwin. *Harvard Business Review* (Soldiers Field, Boston 63, Mass.), May-June, 1959. Reprints $1.00. There are basic fallacies in the methods currently being used to apply the present value concept to the determination of estimated rate-of-return on a proposed investment, asserts the author. In this article, he analyzes some of these "unrealistic assumptions" and then proposes a new approach to using the present value concept, which, he believes, will simplify the calculation of rate-of-return and eliminate the necessity for trial-and-error methods.

INDUSTRIAL RELATIONS

TEN PITFALLS TO AVOID IN LABOR RELATIONS. *Management Methods* (22 West Putnam Avenue, Greenwich, Conn.), May, 1959. 75 cents. Whether or not your company is unionized, costly trouble with the National Labor Relations Board can come your way, according to this article—sometimes even when you're doing your best to help a union. The ten pitfalls discussed here, based on recent cases that came before the NLRB, range from such obvious violations as hiring spies, firing union sympathizers, and threatening reprisals to such apparently innocent ones as clearing new employees with the union before hiring them and helping workers to set up an employee grievance committee.

THE WEAKENING OF MANAGERIAL RIGHTS. By Frank T. DeVyver. *Business Horizons* (School of Business, Indiana University, Bloomington, Ind.), Spring, 1959. $2.00. Although many of management's traditional rights are circumscribed by government agencies in Australia, the author says, in other areas Australian management has retained prerogatives that have been given up by a large segment of its American counterpart. This article compares the current status of American management's rights under collec-

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tive bargaining with managerial prerogatives under Australian compulsory arbitration, reviewing such aspects as wage and hour determination, grievances, seniority, employee discipline, rights of transfer, and merit increases.

THE TRUTH ABOUT WAGE INCENTIVES AND WORK MEASUREMENT TODAY. *Factory* (330 West 42 Street, New York 36, N.Y.), April, 1959. $1.00. A survey of 785 plants on the use and effectiveness of wage incentives and work measurement reveals some interesting facts about these controversial tools: standard-hour wage incentive plans lead two to one over sharing plans; 60 per cent of the plants use work measurement; 51 per cent have wage incentives for non-management employees; fewer small plants use the tools than large ones; 96 per cent say their plans cut costs; indirect incentives are measured with direct standards; predetermined time standards are gaining ground; lax administration and lack of agreement among management, employees, and unions on incentives are two sources of trouble; new types of plans and better measuring techniques will be developed in the future.

FOREIGN OPERATIONS

DOING BUSINESS IN THE COMMON MARKET. By Emile Benoit. *Business Horizons* (School of Business, Indiana University, Bloomington, Ind.), Spring, 1959. $2.00. Some of the most rewarding business opportunities today are in foreign operations, the author says, pointing out that earnings on U.S. investment in the countries that have now joined the common market averaged more than 11 per cent after deductible foreign taxes in 1957. This article discusses two pertinent questions: (1) Can the market be exploited by exporting from the U.S., or will it be necessary to launch a European production effort of some sort—licensing, assembling, or full-scale manufacturing? and (2) If a European operation is necessary, which country will provide the best base for operations?

JAPANESE BUSINESSMEN. *Business Week* (330 West 42 Street, New York 36, N.Y.), April 18, 1959. 50 cents. Japanese businessmen—aided by U.S. contacts during the military occupation and the Korean War, and by extensive licensing agreements with U.S. companies—have been the driving force in the rebuilding of Japan's war-shattered economy, reports this special 29-page feature. The U.S., in addition to realizing profits from Japan's industrial boom, relies on Japanese businessmen to keep their country allied with the West against communism, but despite this collaboration, U.S. investment is limited by Japanese government regulations, and Japanese exports—the lifeblood of their economy—run up against the protective tariffs established by the United States.

MARKETING

THE CONTINUED BOOM IN TRADING STAMPS. By Aaron Sternfield. *Dun's Review and Modern Industry* (99 Church Street, New York 8, N. Y.), March, 1959. 75 cents. Department stores and shopping centers offer the flourishing trading-stamp business its greatest potential market, reports the author in this discussion of the various types of stamp plans used throughout the nation and the sharp controversy they've created. Claims by the National Association of Druggists that the use of stamp plans results in increased

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prices (the percentage of drug stores with stamp plans dropped from 12.2 per cent in 1957 to 8.5 per cent last year) are substantiated in some cases, he says, but he cites the recent announcement by the Department of Agriculture that higher food prices paid in stamp-dispensing supermarkets are more than offset by the premiums received.

INCENTIVE TRAVEL TO DOUBLE IN '59. *Sales Meetings* (1212 Chestnut Street, Philadelphia 7, Pa.), March 20, 1959. 50 cents. The objective is increased sales (by dealers as well as salesmen); the means is a contest; the prize is a company-paid vacation in resort spots such as Florida or the Riviera for contestants and their wives; and the net result is higher profits, according to this special section containing eight reports on travel incentive programs from companies as small as the Sterling Laundry Co. (Washington, D.C.) and as large as the Fedders Corp. Supporting the prediction that incentive travel will double this year is the fact that many companies that discarded incentive travel programs during the 1958 recession are now reinstating them.

THE IMAGE OF AMERICAN BUSINESS: SR'S SEVENTH ANNUAL ADVERTISING AWARDS. By William D. Patterson. *Saturday Review* (25 West 45 Street, New York 36, N.Y.), April 18, 1959. 25 cents. In the belief that corporate advertising is a powerful social force, and that it is in the public interest that the achievements of those who use this force creatively and responsibly be recognized, the *Saturday Review* has made its Annual Advertising Awards for the seventh year. A committee of 24 judges, including leading educators, editors, teachers, publishers, and advertising and public-relations executives, picked an advertisement by Weyerhaeuser Timber Co. as the most distinguished public interest advertisement of the year. This ad and some of the 26 other award-winners are reproduced in the article.

RESEARCH AND DEVELOPMENT

GETTING YOUR SHARE OF WORLD TECHNOLOGY. By Melvin Mandell. *Dun's Review and Modern Industry* (99 Church Street, New York 8, N.Y.), February, 1959. 75 cents. Why invest capital and time in an R&D project if the work has already been done and the results are available abroad? Importing overseas technology (from Israel, Japan, and Russia as well as Western Europe) has profited numerous U.S. companies, according to the author, who gives helpful information on the different techniques for locating and importing technical ideas—among them: (1) subscribing to foreign trade journals; (2) employing agencies that act as brokers, getting their fees from the overseas client; (3) employing European idea scouts or technical observers (scientists, engineers); (4) training and sending an executive overseas; (5) originating R&D projects at foreign labs.

THE 100 "BEST DESIGNED" PRODUCTS. *Fortune* (9 Rockefeller Plaza, New York 20, N.Y.), April, 1959. $1.25. A group of 100 leading international designers, architects, and design teachers have selected the 100 "best designed mass-produced products of modern times," ranging from Olivetti's Lettera 22 portable typewriter (55 votes) to the Gilbert Erector set (14 votes). Readers may be surprised at the inclusion of the Model T Ford, the Victor talking machine, and the Franklin stove in the list of products, all of which are pictured according to rank, with captions giving the name of the product, the date of design, the designer, and the manufacturer.

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Labor, Management, and the Wage-Price Spiral

(*Continued from page* 8)

years from now. And as for the inflationary effects of the wage-price spiral, that, the stockholders feel, is somebody else's worry.

Customers are another group whose needs assume critical importance when a strike impends. The corporate manager knows that many of his large and valued customers have more than one supplier of the products that they buy from him. Unless he can find a way to keep these big customers supplied during the period when his plants are shut down, he risks the real danger of losing them to his competitors—and, competition being what it is, the loss could be a permanent one. Conversely, corporate managers in heavy industries find themselves under strong pressures from customers who have work in progress and look with disfavor upon a strike that would delay completion of the items ordered by them.

A listing of the groups that bring influence to bear upon the strike-threatened corporate manager would be incomplete without mention of the politicians and the communities in which the corporation's plants are located. State governors, mayors of cities, chambers of commerce, local merchants, and a varied assortment of just plain do-gooders all converge upon the hapless manager to urge a speedy termination of the dispute.

WHO GUARDS THE PUBLIC INTEREST?

In addition to making common cause against the corporate manager to avoid or to end the strike, these pressure groups—stockholders, customers, politicians, community organizations, and the like—have in common one other characteristic: None of them knows the underlying facts. None of them is in a position to form a valid judgment as to the right or wrong of the corporate manager's decision to accept the strike. Like the picket line outside the corporation's plants, their tactics are merely a form of harassment that contributes nothing to an intelligent and equitable solution of the dispute. Nevertheless, the interests of these special groups must of necessity play an important part in the decision reached by the corporate manager.

It is becoming clearer every day that, in arriving at conclusions in

the critical area of wages and prices, the corporate managers of the country's major industries must give greater heed to the interests of the largest group of all, the general public. Avoidance by managements of the responsibility to hold down wages and prices in the public interest will lead ultimately to the assumption of that responsibility by the government. Adolph A. Berle's *20th Century Capitalist Revolution* provides a good statement of the governing principle: "Power has laws of its own. One of them is that when one group having power declines or abdicates it, some other directing group immediately picks it up; and this appears constant throughout history. The choice of corporate managements is not whether so great a power shall cease to exist; they can merely determine whether they will serve as the nuclei of its organization or pass it over to someone else, probably the modern state. The present current of thinking and insistence that private rather than governmental decisions are soundest for the community is clearly forcing the largest corporations toward a greater rather than a lesser acceptance of the responsibility that goes with power."

THE CHANGING STATUS OF LABOR

It would be comforting to think of a world where labor leaders and corporate managers work together harmoniously towards a common objective, with an eye at all times to the welfare of the general public. This remains a goal towards which all men of good will should aim; it is not yet a reality. The widespread tendency to regard the interest of organized labor and that of the public as invariably compatible is beginning to be exposed for the fiction that it is. The statistics alone belie it: Despite enormous gains in membership over the past two decades, organized labor still represents less than one-third of the working population of America. The plain truth is that the powerful labor unions in present-day America are special-interest groups, led by well-paid professional managers and exercising tremendous economic power.

It will clear the atmosphere to dispose of another fiction—that is, that these special-interest groups are economically oppressed. In his report on *The Economic Analysis of Labor Union Power,* Professor Edward H. Chamberlin of Harvard University notes: "The condition of labor in America has steadily improved over the years until it is

today without parallel, either historically in the United States or in other countries in our time. Organized labor is on the whole rather well up on the income scale, yet the anachronism that labor is downtrodden and deserving of some special kind of public sympathy carries on."

It is now apparent that the power to dictate prices, which at one time was concentrated in the hands of one special-interest group, the industrialists, has largely passed into the hands of another special-interest group, the unions. By passing along the cost of wage increases in the form of higher prices, corporate managements have become mere conduits for the assertion of union economic power. Presumably this procedure is to continue unless and until the power of organized labor is restrained by law.

But corporate managements should not count too much on restrictive legislation. Admittedly, new laws making labor unions more responsive to the public welfare are urgently needed. Yet the procedures of enacting such laws are likely to be slow, and the results of doubtful value. Although it has been said that organized labor's political power is not in fact great, there is ample evidence to indicate that Senators and Congressmen who make the laws think that it is. Moreover, it appears likely that the political climate will continue to be unfavorable for new legislation so long as the businessmen of the country remain in the bomb shelters in which they have been hiding from the political wars these many years.

It is doubtful that any legislation passed will include effective curbs on the use of labor's ultimate weapon, the strike. Although the Supreme Court has held that neither the common law nor the Constitution confers an absolute right to strike, it nevertheless seems clear that a law placing effective prohibitions on the right to conduct an orderly strike for the purpose of enforcing straight economic demands against a manufacturing corporation would meet with judicial condemnation.

WHAT MANAGEMENT CAN DO

Since management cannot look to the government for help, then, it must turn elsewhere for support. Probably the greatest assistance to corporate managements in the task of restraining union power will be an enlightened public opinion.

During a strike, managements as well as unions go to great lengths to publicize their respective contentions. Why, one wonders, do industries wait for strikes to expound publicly their views on the vital importance of wage-price relationships, the necessity for higher productivity, and similar matters? If public understanding is worth seeking in times of crises, how much more important it is to cultivate public comprehension of the basic economic concepts through a sustained educational program! Money and effort now expended by industry on aimless institutional advertising could, it seems, be more usefully employed for this purpose. As propagandists for their respective causes, American labor leaders have shown far greater skill than industrialists.

Finally, the public interest requires that corporate managers give greater emphasis to principle and less to expediency. In labor relations circles, the mere mention of the term "principle" is very apt to produce contemptuous smiles, if not outright sneers. In no area of modern activity, not even professional politics, does sheer expediency dictate so many policies and decisions. Perhaps the prime example is the so-called "cost of living" increase, which is, in effect, a device invented by unions and managements to protect a privileged class from the adverse consequences of the parties' own mischievous conduct.

Although proper regard for the public interest obviously imposes heavy obligations on *both* labor and management, irresponsible actions by one side do not excuse similar actions by the other. Like it or not, the corporate manager holds power that can be exercised for or against the public welfare. Does the cost of the wage increases demanded by the union exceed the savings to be realized from augmented productivity? Should the additional costs of granting such increases be passed along to the consumer in the form of price raises? These and similar questions have in the past been answered too often on the basis of expediency, summed up in the snappy phrase, "We are running a business here."

THE CORPORATE MANAGER'S RESPONSIBILITY

Yet in the midst of the many cross-currents involved in a labor negotiation, the corporate manager is in the unique position of being best able to determine the *right* thing to do—"right" in the sense of

achieving a fair balance among the claims of conflicting forces, primarily the union members, the stockholders, and the public. The reason for this is quite apparent. Wages and prices affect or are affected by sales volume, production costs, expansion plans, progress in research, and the numerous other factors that in the aggregate comprise the complex picture called the "business" of the corporation. Over-all knowledge of these factors and of the effect of one upon another is the prime responsibility of the corporate manager. No single group—not the union leaders, not the stockholders or the customers—can possibly have the comprehensive grasp of the economic facts of the business possessed by the corporate manager. He, and he alone, is in the unique position of being able to assess the full effect of the wage settlement on the corporation's production costs and to determine whether those increased costs can be absorbed by the business without raising prices and thus passing them along ultimately to the public.

It is obvious that consideration of the public interest can have significant effects upon the decisions to be made by the corporate manager. Conceivably, the public interest might dictate the absorption of the additional cost of the wage increases without price raises. On the other hand, if the union demands are unreasonable to the point where corporate profits will be seriously affected unless prices are increased, the public interest might require that the corporate manager commit the economic power of the corporation to a showdown with the union.

The tremendous impact that the actions of our large corporations have upon the economic and social life of the country is such that endless compromises and retreats, made at the public's expense, cannot much longer be tolerated. Either the leading corporations will meet their responsibilities in the matter of wages and prices or the public inevitably will demand protection from the government. Yet there is no group which has a greater stake in a free economy than the corporate manager.

If the peak to which we have led the corporate manager is a lofty and lonely one, it is only because the path takes us unmistakably in that direction. In the present state of affairs, to whom else can the American public look for relief from the ever-rising spiral of wages and prices? ♦

The Product Life Cycle

(*Continued from page* 14)

So functional control comes full cycle in the decline phase. The executive with over-all responsibility saw to it that the product was successfully introduced; then he yielded a measure of influence to the manufacturing and marketing executive as the cycle unfolded, only to reassert his authority in the final phase.

SOME BIG QUESTIONS

There are those who believe that so many exceptions can be found to the product life cycle that it has questionable validity. They point out, for example, that many products of venerable vintage—such as steel, brick, coal, cement, bread, copper, shoes, and window glass—fluctuate with the economy rather than conforming to the traditional product life-cycle pattern. Similarly, a broad range of consumer and specialty items appears to be impervious to the normal life-cycle pressures. These include such products as drugs, patent medicines, branded packaged foods, printing presses, roller window shades, drill presses, saws, bicycles, and the like.

Some products appear to be less subject to price competition at maturity than others for reasons that are not always readily explainable. One segment of this fortunate group consists of relatively low-priced products with pleasure or health-giving properties that people have come to believe in—and have little basis for judging. Products of this type are generally bought emotionally, frequently from habit or simply liking the product, as distinct from purchases that are made after a more or less judicious comparison of the merits of competing products.

The whole range of proprietary and ethical medicines, and certain proprietary specialties—Angostura Bitters and Hershey chocolate, for example—fall in this category. Another segment includes a large group of products that so dominate the market that their manufacturers are in a position to exercise great influence, if not actual control, over prices.

Durable consumer products, which are more subject to price competition than emotionally bought consumer items, appear to have certain life-cycle advantages over products bought by industry.

These largely reflect the franchise that a refrigerator, or shoe, or furniture manufacturer has at both the retail and consumer level. The new producer of a durable consumer item (radio, refrigerator) faces the costly prospect of building brand acceptance among retailers and consumers, even with a vastly improved or new product. Industry's hard-headed purchasing agents, on the other hand, are willing to buy a new product—or drop an old one—in short order if the reason is demonstrable. With less emotion involved in the buying decision, the advantage of innovation is quickly lost in an industrial product. Imitators often are ready, willing, and able to copy a successful new development, and buyers will frequently accept the "copy" on the basis of relatively minor price, delivery, or service advantages.

Much of the doubt about the validity of the life-cycle concept appears to stem from two basic sources: the economics of the production-distribution process, and the definition of what constitutes a new product.

For instance, anthracite coal does not exhibit the price weaknesses associated with a product in its decline phase. Yet domestic output of anthracite has been cut 50 per cent during the past 15 years as a result of the competitive inroads made by oil and gas. The reason coal prices did not decline, of course, lies in rising union-controlled labor rates and the failure of a large number of marginal producers that were forced by declining volume to close down.

In other words, the fact that anthracite coal does not behave like a product in its decline phase results from a combination of economic factors that made it possible to maintain prices, despite a large drop in demand, by curtailing output. A similar economic balancing act seems to occur to many other commodity or commodity-type products in the decline phase.

A substantial number of products that do not follow the typical life-cycle pattern are protected by the economics of their production-distribution process. Patents, a limited number of producers willing to live and let live, heavy brand-advertising expenditures, and a dominant market share by a single producer—all help a product negate the facts of the life cycle.

However, the most complex element to untangle in understanding

the life-cycle concept involves the question: What is a new product? For example, are stereo records a new product or simply an improved variation of the conventional monophonic record? How about the steam iron versus the dry iron? Or filter cigarettes versus the original nonfilters? Or fluorescent versus incandescent lamps? Or color television versus black and white TV?

The difficulty of determining under what conditions a new product moves into its own cycle and when it is a variation of an old product that merely fluctuates around the life cycle of the "mother" product is a major factor in doubts regarding the product life cycle.

There appear to be few universally recognized characteristics distinguishing the new product from an improved variation of an old one. Indeed, examination of a good many products indicates there may be several degrees of "newness."

1. *The unquestionably new product*—Stereo records show all the signs of a new product at introduction: high price, severe performance problems, spotty distribution, and the like. As another example, the transistor does certain things better than radio tubes, and at a lower cost.

2. *The partially new product*—The steam iron satisfies a consumer need—for dampening fabric—that the original dry iron cannot. However, the steam iron can do everything the dry iron does, hence competes as a general-use iron with the latter. Another example might be the portable radio, which does everything the table radio does and, in addition, can be readily carried about. The key here appears to be a product that extends the market, but also competes with the old product.

3. *The major product change*—Basic technological changes may yield a new product that becomes a mature product virtually overnight by simply replacing the old product. LP records and tubeless tires are cases in point. The principal manufacturers switched from the old to the new product so quickly that the new product had virtually no life cycle of its own.

4. *The minor product change*—Power steering, remote-control TV tuning, and the like may give the product a short-term competitive edge, but they do not alter the life-cycle pattern of the product.

These examples indicate that a new product can reasonably be described in these terms:

> A new product is a product that opens up an entirely new market, replaces an existing product, or significantly broadens the market for an existing product.

Since there are many marginal situations where—even with the advantage of hindsight—it is difficult to distinguish the new product from the variations in an old one, there is obviously considerable risk of error in assessing the future of an existing product. For many years prior to the war, for example, telephone installations fluctuated with building construction and the economic cycle. The telephone showed every characteristic of a mature product during those decades. Yet in the postwar years, telephone installations zoomed and far outstripped new construction.

Why? The answer lies in a change in the promotional philosophy of the telephone company after the war. The gaily colored phones, the advertising about the use of these phones in the den, kitchen, and so on, contributed to an upward push that renewed the growth pattern of what appeared to have become a mature product.

ECONOMIC FORCES AT WORK

Some industries have found it essential to *count on* relatively short life cycles for their products. Ethical drug and packaged cereal manufacturers discovered that sales of new products normally enter a declining phase in three to five years. Therefore, if product-development programs are not planned around this short life cycle, company profits become unrealistically high for a short period and then slump drastically.

A patent-protected product may stay in the high-margin growth phase for years after an unpatented item of identical vintage has been subjected to profit-slashing price competition in its maturity phase. When the Ronson lighter patents expired a few years ago, the product switched from what appeared to be its growth phase to a highly competitive maturity phase virtually overnight.

Fundamental economic forces are constantly at work changing the life-cycle pattern of products. For example, the farm market is in the process of a major shift from small operators who look at farming as a way of life to large farmer businessmen (and even

farm corporations). Such a move is likely to mean that the distribution mechanism for selling the farm market will tend toward fewer and larger outlets. This, in turn, may well speed up the life cycle of farm products as the more aggressive manufacturers sense the opportunity to gain an advantage by stepping up the tempo of marketing change and product development.

This would not be the first time that imaginative engineering has shortened the life cycle of existing products by finding new approaches to better serve customers within industries facing basic changes in their profit climate. Not too many years ago the design of a printing press, or a steam generator, or a machine tool, or a paper-making machine changed relatively infrequently. Today, competitive engineering is forcing constant change in the life-cycle pattern of such products.

Studies of the product life-cycle face the problem that the four major phases of the cycle do not divide themselves into clean-cut compartments. At any given point in time, a product may appear to have attained maturity when actually it has merely reached a temporary plateau in the growth phase prior to its next big upsurge, or an economic recession can give a growth-destined product temporary symptoms of maturity. This means that it is frequently difficult to judge with accuracy the phase of the cycle in which the product currently finds itself.

THE LIFE-CYCLE AT WORK

Perhaps the best means of breathing life and reality into this concept is to trace the life cycle of a product with which all of us are familiar. While the black-and-white television cycle is by no means completed, its course has been so spectacular as to put the spotlight on the economic forces involved in all except the final phase—and the economic pressures of this phase are clearly foreshadowed. The basic elements of the black-and-white TV life cycle have a bearing on all but the economically "sheltered" products, with patent or some other built-in protection.

TV's Introduction

The first commercial TV set was sold in 1947. These early sets had small picture screens and huge performance problems, but the

demand for television receivers overwhelmed all obstacles. Consumers were preconditioned to poor set performance, and scarcity gave them little opportunity at this stage to compare between brands.

The TV set manufacturers' major problem in the opening phase of the cycle was continuous product improvement. This involved both the elimination of performance weaknesses and the evolution of a more attractive and practical product.

TV's Growth

The manufacturers had little idea, in the early days, of the set characteristics that consumers would ultimately demand. There were round screens and rectangular ones. The early 7-inch screens expanded to 10 inches, then in rapid succession to 12, 14, 16, 17, 21, 24, 27, and finally 30 inches. Tuning systems ran the gamut from relative simplicity to Rube Goldberg complexity.

But one thing was clear: The consumer would pay a lot of money for almost *any* TV set. This fact touched off one of the greatest product booms in history. Within two years after the first set was sold, 60 manufacturers had TV sets on the market. By 1951—four years after introduction—the speculative floodgates had been opened and an estimated 100 manufacturers had climbed aboard the TV bandwagon.

All these companies did not start from scratch; some had great advantages. The major radio producers, for example, had a ready-made distribution system for their TV sets. Their problem was to maintain this advantage. The primary need of all manufacturers during the growth phase was to put a sufficient number of sets in the distribution channels to establish the company's identity as a TV producer with the retailer and the consumer. Otherwise, the producer had no franchise with either the seller or the buyer.

Profits skyrocketed in all distribution channels during this period. In fact, the clamor of retailers for sets to sell was a major factor in tempting many manufacturers into the field. The huge demand at this stage made for full margins in every step of the selling process and concealed the economic realities that would eventually assume control.

The principal claim to fame of a sizable proportion of the entries in the "Great TV Handicap" was engineering skill, so it is not

surprising that the basic necessity of producing sets in volume went unrecognized by a large number of the early manufacturers. Instead of turning out sets in volume for the hungry distribution channels, many manufacturers sought to perfect their product. But technology and styling were changing too fast, and a large number of entrants in the race never got beyond the starting gate—the design, or introduction, phase.

As the race for dealer and consumer recognition became more intense, the eager consumer acceptance of the early days turned to a more critical judgment of product performance. There was a growing insistence among consumers that TV sets should *work*. Performance problems had actually been reduced, but competitive pressure forced manufacturers to recognize—and do something about—consumers' complaints. Production still held the key to building a brand's franchise, but marketing was beginning to make its early moves in preparation for the coming struggle at the retail level.

Wittingly or unwittingly, all manufacturers were developing a product "image" with dealers and consumers during this stage. Some took steps to become known as producers of "quality" sets, coordinating their engineering, quality control, advertising, and distribution to this end. They recognized that they could not claim quality for their product and, for instance, let it be sold by hole-in-the-wall retailers, or turn out poorly performing sets.

Other manufacturers aimed at the volume market. This called for large production, adequate quality and servicing, and a saturation coverage of retail outlets. If distributors could not achieve the outlets necessary to meet share-of-market and volume objectives, other means of achieving these goals—such as company-owned branches—were tried.

Another group began developing an image with dealers and consumers as "price" manufacturers. Since few companies consciously set out to develop a "price image," it is probably fair to assume that those in this category had no product image objective to begin with. It's likely that they became "price" manufacturers to all concerned because they reacted on a price basis when confronted with problems in the market place.

The distribution strategy of some producers started to crystallize

in the growth phase. The "quality" set makers began to pre-empt the "quality" outlets, often with selective distribution and price protection as a weapon. The volume manufacturers set about to force distribution by heavy advertising and promotional outlays, as well as an increasing use of company-owned branches to secure adequate retail coverage. Some producers concentrated on the big-city market. Others began developing the peripheral markets around the big centers, counting on the quality of their product to receive the increasingly powerful signals of the broadcasters, and hoping to gain an edge in the fast-developing suburban and rural markets and build a base for a later invasion of metropolitan markets.

TV's Maturity

As the product approached maturity, the "image" of various manufacturers became increasingly fixed in the minds of both retailers and consumers. The "quality" set maker was recognized as being different from the "price" manufacturer. This, in turn, led to a limiting of the number and quality of brands a retailer carried. In other words, the selection process began to shake down into a pattern that reflected consumer needs and retail economics.

With production rolling in high gear, and supply beginning to exceed demand, keeping the flow of sets moving into consumer hands became the manufacturer's dominant problem. Price pressures developed rapidly as distributors and retailers resorted to price-cutting to move sets. Normally, price cutting moves like a wave—from retailer to distributor to manufacturer—and the impact of the price-cutting wave on the various distribution channels is partially obscured by the tendency of one element in the distribution process to "take over" responsibilities usually assumed by the other rather than cut prices. The reduction in total profit, however, is just as real.

At this juncture, many retailers simply stopped selling TV sets. They had entered the field because of its high early profits, found the servicing problem costly, and dropped out when profit margins plunged. An industry study estimates that one out of every five retailers handling TV sets at the peak had given up by 1958.

The dwindling number of retailers—and the growth of large, low-margin, high-volume discounters—coincided with the mount-

ing need for factory volume and greatly increased the competition among manufacturers for a balanced representation among the remaining retailers. The sales job, which had been largely one of product allocation during the growth phase, now became one of securing outlets. This took salesmanship of a high order.

As the battle for retail outlets and consumer acceptance intensified, however, marketing emphasis gradually changed. It became increasingly evident that the distribution problem was not to be solved by salesmanship alone. Indeed, evidence began to appear that undue concentration on the sales and promotional aspects of the marketing process resulted in high costs that did not yield a commensurate improvement in market share. An increasing number of marketing executives, noting this fact, began to reassess their positions. From this probing emerged conclusions that challenged old concepts and pointed to new approaches in strategic planning:

- The complete internal and external redesign of the manufacturer's TV line each year is enormously expensive, and there is little to indicate that the consumer demands a complete overhaul. It was necessary in the early years because of the continuous flow of technological advances, but this is no longer true.
- The large number of models and chassis required by the numerous early engineering improvements has become an expensive anachronism. Reduction in length of the line offers substantial manufacturing and engineering cost savings. And retailers favor shorter lines.
- There is a widespread reliance among TV manufacturers on privately owned distributorships in big-city markets to sell their product, despite clear-cut evidence that the objectives of the distributor and the manufacturer in such a situation are frequently not compatible. As an individual entrepreneur, the distributor requires a profit on his sales to stay in business. Because of the marginal profit inherent in high volume, however, the manufacturer's profit interest is often best served by a breakeven or even a slight loss on sales by the distributor (or branch) if this increases volume substantially.

These few examples emphasize the growing need for product expenditures to be "managed" to optimize the over-all profit of the company rather than reflect the presumed requirements of a single function, however important. Thus, savings generated in engineering and manufacturing by reducing the number of models and chassis, or by stretching out the restyling cycle, might be used in bolstering the distribution process or as an increment to profit.

During the growth phase, a company could afford a light control over costs, since errors resulting from poor planning were offset by mounting volume. But this luxury is fast disappearing from TV manufacturing. Today there are 35 manufacturers left of the 100 who were in business at the peak seven years ago. A third of these concerns do 75 to 80 per cent of the industry's volume. Thus the need to "manage" the marketing of this product is apparent.

TV's Decline

If the portable TV set is a "new" product, the console may well be in its decline phase today. Prior developments in radio set manufacturing—with the portable and clock radios reducing the market share of table models—indicate this is a possibility. The commercial exploitation of color TV, when that occurs, is likely to reduce the market for black and white TV.

The need for tighter cost controls and "managed marketing"—key characteristics of the decline phase—is clearly evident in television today. There have been sharp reductions in the number of models and chassis by leading producers. There is evidence that model-line planning is being better coordinated. Significant moves are being made to get control over the distribution function, to secure balanced dealer structures, and to provide the retail foundation for volume. Efforts to reduce manufacturing costs have found some producers taking steps to make or buy parts at lower cost in Europe or Japan. If black and white TV is not yet in its decline, all the signs indicate that this phase may not be far off.

VALUE OF THE CONCEPT

Despite the many unanswered questions, the life-cycle concept has proved to be a sound planning tool when properly used. An appliance manufacturer was considering an expensive advertising

and promotional campaign designed to create a "quality image" for its product. A survey showed that this particular appliance was in the late maturity phase of the life-cycle. Competition was keen, and the company's product had spotty distribution (rarely in "quality" outlets); it was considered a "price" item by retailers, and recent models had had serious performance deficiencies. If this product had been in the growth phase, attempting to change a "price" image into a "quality" image might have been practical. The fact that this product was in the maturity phase, however, argued that, in the short term, funds could be used to better advantage in other directions. The reason, of course, was that both the consumer and retailer image of this and competing products had "hardened." Any material change in this image would require a huge advertising and promotional expenditure over many years—and years were too long to wait for improvement.

Another manufacturer was considering eliminating wholly-owned branches in large cities because they were losing money. However, the product was a mature one, and field surveys indicated that gaining tight control of retail distribution in big cities was essential to maintaining volume. This pointed to the need for *more,* not fewer, branches, and led to a careful investigation of the whole distribution process. It was found that (1) company-owned branches had consistently captured a higher market share than the best independent distributors, (2) the *manufacturing profit* on branch volume easily offset branch losses, and (3) in spite of branch losses or break-even results, the company was generating substantially greater profits in branch markets than distributor markets having similar potentials—enough to make the return on large branch investments very attractive. In this case, a major decision was reversed because the life-cycle position of the product forced a more intensive study of the problem.

The life-cycle concept has been valuable in planning the future product exploitation strategy of many companies. For example, General Motors' early decision that a strong dealer organization was essential to its future success gave this company an important competitive edge as the automobile attained maturity. The decision of companies like Stewart-Warner, CBS, Raytheon, and Stromberg-Carlson to withdraw from television set production early

in this product's maturity phase points to their recognition that life-cycle pressures were working against them.

On the other hand, many companies have made decisions damaging to their product's position in the market, indicating that they did not fully understand the forces at work at various stages in the product's life cycle. Servel decided to switch distribution of its gas refrigerators from local gas companies to the more typical distributor-dealer channels during the product's maturity phase. The loss of sales momentum at this critical juncture in the gas refrigerator's life cycle is regarded as an important factor in the company's ultimate withdrawal from refrigerator production.

PROFITS AND PERSONNEL

To be sure, much remains to be learned about the economics of the product life cycle. But studies to date have shown that two critical management areas are best understood in terms of this cycle: (1) product profitability, and (2) the personnel requirements of product management.

Product Profitability

The fact that product profits are greatly influenced by their life-cycle position points to the wisdom of taking this into account in product-exploitation strategy. Great risks can be taken in the growth phase. Indeed, time is so critical at this juncture that such risks often *must* be accepted. However, a careful husbanding of resources is essential in the later maturity phase, when profit margins are so low that losses become very difficult to recoup.

Underlying any discussion of the product life cycle is the pressing need for management effort to insure the generation of new products to provide stability of company profits. This is particularly vital in industries where product life cycles are characteristically short. The role of the research and development functions and the strategy of merger cannot be underestimated as elements in long-term profitability—or even survival.

Personnel Strategy

The perspective that the life-cycle concept provides top management in the development of executive personnel can greatly in-

fluence company profits. When General Motors chose Harlow Curtice as its chief executive in 1953, the directors' action undoubtedly reflected the maturity of the automobile itself and the need for a strong marketing executive.

The shifting of the functional job skills that are required in the several phases of the product life cycle makes it possible for top management to assess future personnel needs with some accuracy. Research and engineering are the key in the introductory phase, manufacturing in the growth phase, marketing in the maturity phase, and financial and over-all management judgment in the decline phase.

However, since phases of individual product life cycles are constantly changing and usually overlap phases of other products, there is evidence that a *balanced* group of functional executives is of prime importance. Companies dominated by engineering, manufacturing, marketing, or financial executives seem to have problems in other phases of the cycle or in managing a group of products in different life-cycle stages. A fast growing chemical company, dominated by research-oriented executives, discovered to its surprise that several key products were in the late maturity phase and were not being effectively marketed. Top management considered theirs to be a "growth" business—which, in general, it was—but had not faced up to the problems of the mature products in their line.

The need for a balanced group of functional executives is attested to by the expanding product line of the average company. This means that more and more individual products are likely to be in different phases of the life cycle at a given point. For example, the major TV producers also sell radios and high-fidelity equipment. Each of these products is in a different phase of the life cycle: hi-fi is rapidly growing, TV is at maturity, and table radios are close to the decline phase. Thus each has different problems and opportunities and requires executives with somewhat different talents.

In the long run, since all products get older and the maturity and decline phases constitute the longest portion of the life cycle, a growing demand for executives who can accept full profit responsibility is clearly forecast. How these men are to be identified and trained is one of the problems that many companies, with an eye on the life cycle of their products, are wrestling with today. ♦

Uncle Sam Wants You!

(*Continued from page* 24)

It should be pointed out that no comprehensive career ladder exists under the Civil Service System. Some departments and agencies, or more specifically bureaus within departments (such as the Foreign Service), have career systems, but formal systems are the exception rather than the rule. In a sampling of 800 persons in grades GS-15 ($12,770) and higher, the Civil Service Commission found that over half had worked in only one agency. An additional 22 per cent of this group had worked in only two agencies.

A Career Development Program

In recognition of this situation, the second Hoover Commission, in 1955, recommended the creation of what they called a "Senior Civil Service," to be composed initially of about 1,500 career administrators and eventually to grow to 3,000. The essential features of the proposal called for differentials in rank and basic salary, transferability, and personal status.

Despite the general agreement on the objectives, the specifics of this proposal met with a storm of objections—from the Congress, from some personnel organizations, from students of government, and from the incumbents of the positions themselves. The pros and cons were vigorously debated for more than three years. Finally, in March, 1958, the President issued an executive order establishing a Career Executive Program that is a sharp modification of the original Hoover Committee proposal. But even this modified plan has failed to get the Congressional support that is essential to any effective program.

The problem of assuring a continuing supply of able, well-trained, experienced career executives is still in front of us. In order to attract high-quality individuals, both at beginning levels and at higher grades, the prestige of these top administrative positions must be enhanced. We must somehow convince a larger proportion of the top talent produced annually by the nation's colleges and universities that government service offers a challenging, satisfying, and honorable career. Once having recruited them,

we must provide a program of career development and a promotional ladder that will bring the cream to the top.

ENGINEERS AND SCIENTISTS

Of all the areas in which outstanding leadership is imperative, science and technology certainly rank near the top. The Soviets have clearly demonstrated that their system is capable of producing scientists of brilliance and ingenuity. Their efforts have resulted in scientific breakthroughs that have surprised and alarmed the entire world. The framers of the Constitution never contemplated that the federal government would ever include among its responsibilities the role of stimulating and coordinating the country's scientific progress. Yet the forces that are shaping the world today clearly make this necessary.

This year the federal government will spend over $5 billion on research, engineering, and development. This vast sum will pay for about half of all the scientific research and development carried on in the United States. Another $5 billion will be spent by industry, universities, and private research foundations. Because of the complexity of the problem of research and development for defense, the effectiveness of the government's program depends very heavily on the quality of the planning that goes into it. Quality, in turn, depends upon the ingenuity and creativeness of the scientists who participate in it. The shortage of creative scientists and of senior scientific administrators has made it difficult to plan and supervise effectively the large-scale programs now under way. It is not generally known that the federal government is the largest employer of scientists and engineers; today it employs about 50,000 professional engineers and 26,000 physical and related scientists—some 6 per cent and 8 per cent, respectively, of the nation's total supply of trained personnel in these occupations.

Competing with Industry

As in the case of political and career executives, the government has been less than completely successful in attracting and holding an adequate number of engineers and scientists. Basically, of course, this has been due to the nationwide shortage of trained people in these categories. Imbalance in the demand-supply situa-

tion of any commodity tends to bid up the price, and this has certainly been true with regard to engineers and scientists. In the private sector of the economy there are no limitations that prevent a business from quickly adjusting its salary rates to the prevailing market price. Salaries in the federal government, however, can be adjusted only by legislative action—a process which does not lend itself to rapid or frequent adjustment. It is true that special legislation has provided special pay categories for a limited number of higher-grade scientists and has authorized the Civil Service Commission to recruit for certain critical occupations at above the normal minimum rates prescribed by the Classification Act. These stopgap measures have afforded some relief, but the inherent lack of flexibility in the government pay systems puts federal agencies at a clear disadvantage in competing with private industry for scarce manpower.

Because it recognizes that the problem in the area of science and technology is basically one of adequately trained manpower, the government is playing a major role in alerting the nation to the need for increasing our facilities to produce a continuing supply, and in stimulating both public and private efforts to help meet that need. The work of the President's Committee on Scientists and Engineers, the National Science Foundation, the Department of Labor, the Department of Defense, and the President's Science Advisory Council is illustrative of the thought and effort being brought to bear on this aspect of the problem.

Challenging Opportunities

More than half of the government's $5 billion research budget is spent in laboratories owned and operated by industry, universities, and other private groups. The government effort, therefore, exerts a powerful shaping influence on scientific and technological programs of the entire nation. Not only its military security, but the nation's health, economic welfare, and the quality of its higher education depend in no small measure upon the quality of leadership that the federal government is able to provide.

The staffing of government scientific positions must not be adversely affected by erroneous concepts of the nature of public service. The esteem, or lack of it, in which public employment is

held by the American people directly affects morale and efficiency of federal personnel and encourages or dissuades men and women of character and ability from undertaking public careers. The unfair but persistent caricature of government employment as a boondoggle appealing only to those primarily interested in job security must be eradicated.

The fact of the matter is that federal programs in the area of science and engineering offer unique and challenging opportunities which exist nowhere else. The opportunity for performing fundamental research without the necessity of compromising the work for the sake of speed or profit; the freedom to discover the truth and publish it without pressure to protect the employer's competitive position; the dramatic and breathtaking activities in space-flight development; the opportunity for life-scientists to pioneer and carry on wherever there are problems of coping with man's environment so that human life may be sustained and enriched—these are some of the challenges and opportunities the federal service has to offer. We must convince both college people and mature scientists that this is so.

GOVERNMENT PERSONNEL MANAGEMENT

Modern industry has accepted, almost universally, the principle that personnel management is an integral part of general management responsibility and accountability and must be lodged with the head of an organization. The federal government, however, has lagged behind industry in the acceptance and practical application of this principle. Nearly every President during the 20th century has complained about the lack of administrative tools to handle the rapidly expanding responsibilities of his office, and for most of the history of the republic, the President has had no staff services to assist him.

On behalf of the President, the Civil Service Commission is primarily responsible for providing leadership in personnel matters. The original purpose of the Civil Service Commission was to serve as a watchdog to protect the government and its employees against the evils of the spoils system. Over the years, however, it has gradually assumed additional personnel management functions, such as career development and training, incentive awards, em-

ployee-management relations, retirement, insurance, and the like.

Does some of the difficulty in attracting and retaining top-flight people stem from inadequacies of the government's organization for personnel administration? Might the government be more successful if an office of personnel management with a wide range of activities were established within the Executive Office of the President? These are some of the questions that must be faced squarely and objectively.

NEEDED: HIGH-CALIBER LEADERSHIP

Circumstances have made the United States the leader of the free world. The government's responsibilities at home and abroad are such that we dare not gamble their efficient and effective administration on second-rate leadership. There is strong evidence that the federal government does not compete on equal terms with private industry in attracting and retaining a fair share of the ablest leaders that this nation produces. In view of the stakes, the government must have the very best talent—in political executive positions, in its career executives, in its scientists and engineers, and throughout its career service.

Throughout all of this, and of primary significance, is the attitude of our ablest citizens toward government service. There are strong indications that men and women of outstanding ability tend to shy away from public service—and this is equally true, be it federal, state, or local government. The reasons for the development of this attitude are difficult to explain. Many excuses have been advanced—some fancied, some real. But whatever the reasons, abstinence from public service on the part of men and women with capacity for leadership is a luxury that the nation can ill afford in the dangerous times in which we live.

We have a great civilization to save or to lose. Whether we win out in the end depends, in no small measure, upon the willingness of our finest administrative talent to put public service above personal interests and convenience. Like the Greeks of old, we must cultivate and perpetuate the notion that public service is a fundamental obligation and privilege of citizenship—that he who serves the commonwealth deserves the highest respect and admiration of his fellow men. ♦

SURVEY OF BOOKS FOR EXECUTIVES

THE STATUS SEEKERS. By Vance Packard. David McKay Co., Inc., New York, 1959. 376 pages. $4.50.

*Reviewed by George Christopoulos**

If *The Status Seekers* were simply a popularization of sociology, it might have been a valuable book, for it brings together interesting theories and experiments by hundreds of social scientists. But it also has pretensions as a critical analysis of the United States and its future in world affairs, and the author gives no evidence of being equipped or willing to handle such a subject in the intellectual manner it demands.

In a more ambitious book than his best seller, *The Hidden Persuaders,* Mr. Packard essays to prove that American society is suffering from hardening of the social arteries. He feels that fluidity among the classes has lessened to such a degree that some time in the near future—if the "classlessness" of the U.S. is not restored—the Diploma Elite will dominate the country in the way that the Junkers once controlled Germany. Then there may well come an American demagogue who will take the masses on a wild adventure and destroy the nation.

* The Biddle Survey, Biddle Purchasing Company.

This apocalyptic theme is too ponderous for the popular-level approach of Mr. Packard. The cardinal shortcoming of *The Status Seekers* as a work of social philosophy is that it lacks historical understanding and perspective. Instead, Mr. Packard seems content to echo the thinking of C. Wright Mills (*White Collar* and *The Power Elite*) and William H. Whyte, Jr. (*The Organization Man*).

The Status Seekers is a dubious *exposé* of the diminishing opportunities for business and social success. In striving to reach, or to stay at, the upper-class heights, Americans fend off other climbers by exercising their prejudices against them in business, social clubs, schools, churches, and politics. Mr. Packard claims that there was more cross-pollination among classes in the past than there is now, when each class has isolated itself.

The scapegoat for all the evils in American society, according to the author, is business. (He doesn't admit the possibility that Big Business itself may be a victim of historical trends, rather than the villain responsible for today's conditions.) A writer with one eye on the best-seller list sometimes finds it easy to demolish a straw man and suggest glib "solutions" to problems that serious social scientists know are

difficult to solve. Mr. Packard's panacea is a vague admonition that everybody should be treated for his own worth, not as a representative of a certain socio-economic, religious, or ethnic group. When this comes to pass, the Golden Age will return, and with it the American Dream (which he equates with Horatio Alger success).

Mr. Packard is a new arrival in the ranks of the social philosophers. He dismisses too readily the capable thinkers in the field, particularly José Ortega y Gasset, who, in *The Revolt of the Masses* (1931), pointed out the phenomenon of the emergence and dominance of "mass man" in the United States and throughout the world. Unlike Mr. Packard, the Spanish philosopher-writer probed deeply into the nature of mass man and saw the centuries-long process of philosophic changes that gave birth to the machine-powered, collectivistic societies in Europe, the U.S.S.R., and the U.S. Mass man is a state of mind; it exists in all classes, and "snobbism" and "status seeking" are two of its milder symptoms. Mr. Packard has little concept of the enormity of the problem—or, if he does, he gives no indication of it in *The Status Seekers*.

The United States is not a paradise. One of our novelists has called it "the air-conditioned nightmare." But it must be judged in relation to the rest of the world, which is also in the machine-age vise. People in the Communist world are trapped in a political Iron Maiden. We have not come to that.

A recent book by a serious American writer-thinker analyzes our contemporary situation in a way that even Mr. Packard might envy. In *The Rediscovery of Man,* Waldo Frank gets to the crux of the problem that Mr. Packard has merely touched upon:

"The final cause of our modern age, of its machine-jungles where man is again a savage under a perilous, pathless, lavish nature, and of our collective societies of depersonalized individuals, is the will in Europe which preceded both the science and the machine. The science and the machine, of course, although modified, must remain in order to serve man; it is his will—their cause—which must be transfigured."

Briefer Book Notes

(*Please order books directly from publishers*)

GENERAL

THE BUSINESSMAN'S GUIDE TO PRACTICAL POLITICS. By J. J. Wuerthner, Jr. Henry Regnery Company, Chicago, 1959. 235 pages. $3.75. Beginning with an over-all view of current political conditions and their impact on business, the author discusses in a clear and realistic manner all phases of political activity—legislative background, campaigning, lobbying, corporate public-affairs activities, legal do's and don'ts, and a detailed description of a new and pioneering approach to practical politics.

HOW 300 COMPANIES HANDLE CONTRIBUTIONS. The Dartnell Corporation, Chicago, 1958. 200 pages. $15.00. This survey brings out in the open many of the special problems that confront management in connection with philanthropy and tells what participating companies are doing about them. Some of the topics covered are determining how much to give, some tax considerations, the beneficiaries of corporate generosity, educational giving, and handling employee contributions.

TOOLS AND TECHNIQUES OF MODERN MANAGEMENT. The Bureau of Business Management, College of Commerce and Business Administration, University of Illinois, Urbana, Ill., 1958. 63 pages. $2.00. The talks published here were given at an Institute on Industrial Management at the University of Illinois in cooperation with the Illinois Manufacturers' Association. Some of the topics discussed are sins of employee communication, current marketing trends for light industry, an evaluation of managerial and employee fringe benefits, and the business executive's community responsibility.

NEW DIRECTIONS IN U.S. FOREIGN ECONOMIC POLICY. By Richard N. Gardner. The Foreign Policy Association, Inc., New York, 1959. 77 pages. 35 cents. The author offers a practical guide for charting the new directions in foreign economic policy which current events are forcing upon the United States.

TOOLS FOR MACHINE LITERATURE SEARCHING. By J. W. Perry and Allen Kent. Interscience Publishers, Inc., New York, 1958. 972 pages. $27.50. The first volume in a new series on library science and documentation, this book discusses the methods, procedures, and engineering of analyzing, encoding, and searching for recorded information. Some of the topics covered are special codes, question analysis, classifying material, and systems engineering. A Semantic Code Dictionary is also provided.

DECISION-MAKING AND PRODUCTIVITY. By Seymour Melman. John Wiley & Sons, Inc., New York, 1958. 260 pages. $7.00. The four parts of this textbook cover alternative methods for productivity growth, decision-making by the union, decision-making by management, and the effects of union and management decision-making on productivity.

ADMINISTRATIVE EXPENSE CONTROL. The Dartnell Corporation, Chicago, 1958. 326 pages. $24.00. A Dartnell survey of what 1,000 companies are doing to improve profits in a period of rising costs. Included are sections on reducing personnel requirements, controlling the costs of hiring and training, organizing for increased production, improving the quality of office production, and checking mail-handling costs.

OFFICE

OFFICE MANAGEMENT: *Principles and Practices: Fourth Edition.* By John W. Neuner. South-Western Publishing Company, Cincinnati, Ohio, 1959. 714 pages. $7.00. This revision of a widely used college textbook has been expanded to include two important concepts, human relations and cost reduction. A separate section on office automation has also been added.

OFFICE MANAGER'S HANDBOOK. Edited by Christopher M. Weld. The Dartnell Corporation, Chicago, Ill., 1958. 1,375 pages. $15.00. Designed to answer the problems posed by the changing concepts of office management and the challenge of automation, this handbook covers all phases of office operations, including job analysis, salary administration, supervision and training, record keeping, labor relations, communications, and electronic data processing. A bibliography of office management and a directory of office management services and suppliers are appended.

PUNCHED CARDS: *Their Application to Science and Industry: Second Edition*. Edited by Robert S. Casey, *et al.* Reinhold Publishing Corporation, New York, 1958. 697 pages. $15.00. Thoroughly revised and enlarged, this latest edition describes every aspect of punched-card systems, including hand- and machine-sorted cards. It also shows how to find, arrange, use, store, and retrieve information of any kind. An annotated bibliography on the uses of punched cards is also included.

OFFICE MANAGEMENT HANDBOOK: *Second Edition*. Edited by Harry L. Wylie. The Ronald Press Company, New York, 1958. 802 pages. $12.00. A comprehensive and up-to-date compendium of working information on every aspect of office management. Divided into 21 sections, the book covers every phase of office activity including cost control, communications, location and layout, personnel development, supervision, and systems and procedures. Each section is cross-referenced and indexed for easy use.

PROCEEDINGS OF THE 1958 ANNUAL CONFERENCE. Life Office Management Association, New York, 1958. 282 pages. $8.00. Included in these proceedings are papers on electronics, office methods, personnel problems, work simplification, and the public relations aspects of office management.

INSURANCE

LIFE INSURANCE: *Third Edition*. By John H. Magee. Richard D. Irwin, Inc., Homewood, Ill., 1958. 819 pages. $5.70. This new edition covers the latest developments in the insurance field, such as the integration of health coverage with life insurance. New chapters have been added on both individual and group health coverage and the material in the chapters on pension plans, tax and investment phases, and programing has been brought up to date.

PROCEEDINGS OF THE FIFTY-SECOND ANNUAL MEETING. Life Insurance Association of America, 488 Madison Ave., New York, 1958. 310 pages. Gratis. Basic research and financial processes, legal activities, merchandising, and international affairs are among the topics covered in this conference report.

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